# MaxiForce Bollards

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# WELCOME TO THE WORLD OF MAXIFORCE

# TABLE OF CONTENIS

| Welcome to MaxiForce             | 03 |
|----------------------------------|----|
| How to choose the Right Bollard? | 04 |
| Why choose MaxiForce?            | 06 |
| MaxiForce Product Line           | 08 |
| Collapsible Bollards             | 08 |
| Light Removable Bollards         | 10 |
| Standard Removable Bollards      | 12 |
| Fixed Bollards                   | 14 |
| Accessories                      | 1  |
| Comparison Chart                 | 18 |
| Inspiration                      | 20 |
| Ultimate Guide for Professionals | 22 |

# DEAR READER,

Thank you for your interest in our products and services. Choosing a bollard solution for your project is an important and sometimes complex decision. We hope this catalog will guide you through the process, answer your questions and inspire you to collaborate with MaxiForce – the most innovative bollard developer on the market.

MaxiForce has pioneered the field of bollard technology since 1997. Over the years, we have supplied thousands of solutions throughout the U.S. and Canada. MaxiForce Bollards are found on college and university campuses, in leisure and sports parks and playgrounds, shopping centers and storefronts, fire access lanes, parking areas, residential subdivisions, commercial and government buildings, military installations, and many more.

All our bollards are designed and manufactured in the U.S., featuring the latest technology and top-quality components.

At our R&D Center, we work continuously to take bollard technology to the next level – in terms of efficiency, sustainability, ease of use, ease of installation, and peace of mind for our customers.

If you are looking for a functional and reliable bollard solution, and outstanding customer support for your project, I believe you have come to the right place. But please, take your time and explore our solutions for yourself. If you have any questions, we are always here to help; we're as renowned for our industry-leading after-sale support as we are for our bollard solutions.

Welcome to MaxiForce's world of smart and innovative bollard solutions!

Sincerely,

JOHN BRAY GENERAL MANAGER, MAXIFORCE



# HOW TO CHOOSE THE RIGHT BOLLARD FOR YOUR NEEDS?

Every decision you make is an experience for someone else, and that means choosing the right bollards can be a complicated task - especially considering the number of choices available on the market.

MaxiForce offers an extensive range of more than 50 standard bollard solutions. In addition, we are capable of customizing products to make them fully compliant with your individual needs. Before choosing your bollard solution we advise you to consider carefully what you expect from your bollard.

Here are MaxiForce's five tips on how to choose the Right Bollard Solution:



# 1. Material

Consider what kind of material will make your bollard durable enough, but also complement the landscape of your project. Generally, bollards are available in a range of raw or engineered materials. These tend to include timber, concrete, steel, and polymer. MaxiForce bollards are manufactured primarily from high quality, US certified steel, which guarantees great durability, functionality, and design. In addition, they come in a wide variety of colors and finishes to ensure a perfect blend into your project and landscape.



# 2. Functionality

Consider what the bollard's main function will be and where it will be installed. Would you like to improve the security around a building? Or do you require a bollard solution to manage traffic flows? Do you need to provide immediate access to more secure areas for first responders? Whatever the purpose you want to serve, we have a model designed to meet your individual needs.



# 3. Design

Aesthetics is an important factor when picking the best style of bollards for a given application.

Consider if you would prefer a traditional, heritage design or if you would like to achieve a more modern look. Your bollards should complement your landscape and blend in with the surrounding buildings - that's why we've made MaxiForce bollards available in an extensive range of shapes, sizes, and colors, ready to accommodate your design requirements.



# 4. Value for Money

When choosing a bollard make sure you consider the most cost-effective long-term solution. Some materials offer much greater value for money and lower lifecycle costs than other options. MaxiForce products offer easy installation and repair, and relatively low maintenance costs.



# 5. Reputable Quality

Should you have any questions or

concerns, remember that our friendly

team is always happy to discuss your

needs and give you valuable advice.

410-552-9888

410-552-9939

sales@maxiforcebollards.com

When you've made your final decision on the bollard type you want to purchase, make sure your bollards are manufactured by a trustworthy provider. Check if the provider offers after-sale assistance. When you choose MaxiForce, you can rely on the quality of our products and our unparalleled support experience.

04

# WHY CHOOSE MAXIFORCE BOLLARDS?



At MaxiForce, we aim to transform the bollard industry by committing to deep innovation that solves problems and forges new and bold solutions. While we strive to be the best in the industry, we always prioritize the needs of our customers first and every step we take along the way is dedicated to better serving you and your needs.

As a valued MaxiForce client, you truly benefit from our:



# Experience

MaxiForce has been a key player in the bollard industry since 1990, developing and producing top-of-the-line bollards and bollard accessories. Over the years, we have supplied thousands of solutions across the U.S. and Canada. We pride ourselves as being masters of the craft.



# Quality

All of our bollards are designed and manufactured in the U.S., using the latest technology and top-quality components. At our R&D center, we work continuously to take the bollard technology to the next level in terms of efficiency, sustainability, and ease of use. Our customers can expect nothing less than the best.



# Variety

The signature hallmark of the MaxiForce line of products is versatility. We offer a broad range of designs, applicable to every site and climatic condition. Our unique portfolio includes collapsible, removable and fixed bollard models, available in different sizes and in a wide variety of powder coat colors.



# Compliance

All MaxiForce products, material content, and manufacturing processes are in compliance with industry codes, standards, and performance-based measures. In addition, we always offer a complimentary consultation service that supports your LEED certification efforts. For more information on compliance, review our guide on Page 22.



# Innovation

Focus on innovation is at the core of our business. Through continuous innovation in terms of products and services, we strive to meet all customer demands and deliver value beyond expectations. We listen to our customers and incorporate feedback into our ever-growing, evolving, and improving line of products.



Providing unparalleled service,

premium quality products, and great

put MaxiForce at the forefront of the

commitment to efficiently cover all

your bollard needs make us a great

Join us on our journey to transform the

bollard industry. We believe our

continuous progress and full

partner.

bollard industry!

value to all our customers is what has

# Commitment

When you work with MaxiForce, you don't just invest in an exceptional product but in exceptional service.

Architects, contractors, and end-users choose MaxiForce not only for the most innovative bollard features on the market but also because of our industry-leading support before, during and after purchase.



# **FEATURES**

- The fastest emergency ingress solution available on the market when life safety matters
- Approved for firelane use in many cities, townships, and municipalities by the local AHJ\*
- The patented breakaway feature allows emergency access without damaging the bollard or the vehicle
- Can be manually unlocked and folded down quickly by a padlock or by a wrench
- Once collapsed the bollard body requires only 3-5/8" clearance to allow vehicles to pass over the bollard
- Can be easily returned to original locked position without the need for tools
- Bollards can be pushed over from any angle
- Bollard body can be removed leaving a flush surface that won't catch on equipment such as street sweepers or snow plows
- Two base types for versatile installation
- Available in a wide selection of powder coat colors and finishes



\*Authority Having Jurisdiction

All MaxiForce Collapsible Bollards feature the unique and patented breakaway system allowing emergency first responder vehicles to push the unit over when life safety situations arise, saving valuable response time. The breakaway system works by allowing the unit to "breakaway" from the base, permitting quick access without using the wrench operation (also patented) or removing a padlock. Two unique inserts are designed to shear when the bollard is pushed over by a vehicle. This gives the vehicle access without causing significant damage to the bollard or vehicle. By replacing the inexpensive inserts, the bollard can be placed back into service quickly by the use of a standard Allen wrench.

# **EASY OPERATION**



# Patented Hydrant-Wrench Operated Bollard

Ideal for locations requiring traffic control while allowing designated vehicles to pass quickly with the use of a fire hydrant wrench. The standard hydrant nut is a 5-sided AWWA nut, which matches fire hydrant wrenches carried by most first responders. (Other nut styles are available.)



# Standard Padlock Operated Bollard

Ideal for designated locations where traffic control is required and only authorized vehicles and personnel with the appropriate key may unlock the bollard and pass through.





# Two Base Types

MaxiForce Collapsible Bollards have two base options to fit installation requirements. Collapsible bollard operation is not affected by the choice of the base type.





# Choice of Head Styles

MaxiForce Bollards have several style options, including a choice of head styles to top the bollard bodies. All three bollard head styles are removable and interchangeable. All heads attach to the bollard body mechanically.

# **Easy Installation**

Footings are engineered for easy installation taking advantage of standard sized augers and heavy equipment buckets.







# Patented Breakaway Feature

MaxiForce's patented breakaway insert is a distinctive feature allowing emergency and safety personnel immediate access beyond the bollard without leaving the vehicle, saving valuable response time. It works by allowing the unit to "breakaway" from the base, permitting access without using the wrench operation or removing the padlock.

# TYPICAL APPLICATIONS

- Fire lanes & alleyways
- Emergency entrances
- Bike trails & trailheads Office buildings
- School grounds
- College campuses
- Playgrounds & parks
- Parking areas

- Government & military installations
- Hospitals & health facilities
- Malls & shopping centers
- Residential subdivisions
- BallParks & stadiums
- Apartment complexes Pedestrian walkways
- City downtown areas

# **SIZES**

Standard Height: 32" above finished surface

MaxiForce Collapsible Bollards are available in custom sizes according to your needs.

For more information about custom orders, please contact us at:

sales@maxiforcebollards.com

TANDARD

High-Reflective White Safety Yellow

Roman Bronze Matte

Black Matte



Black Fine Texture

MaxiForce Bollards are available in a wide variety of powder coat colors & finishes. We also offer optional Zinc Rich Primer, Galvanization and Reflective Tape. For a full listing of our standard colors, and a look at other color options, please see Page 23 of the current catalog or visit our website







# **FEATURES**

- Superior functionality, flexibility, and design
- Much lighter than typical removable bollards while providing the same visual deterrence
- Can match the siteline of surrounding fixed bollards
- Unlocks and removes quickly and easily
- Available in both padlocked and fire hydrant wrench operated versions
- Bollard body can be removed leaving a flush surface that won't catch on equipment such as street sweepers or snow plows
- Multiple head style options
- Available in round or rectangular body styles
- Available in a wide selection of powder coat colors and finishes



MaxiForce Light Removable Bollards are unlike anything on the bollard marketplace. Superior engineering delivers a bollard that offers security, while allowing personnel to move the unit easily at the same time. All bollards from this product line detach completely from their bases to open up the passage or roadway. Our Light Removable Bollards are available as padlock operated or with the unique wrench operation feature that provides added security and ingress flexibility for emergency vehicles.

# **EASY OPERATION**



# Patented Hydrant-Wrench Operated Bollard

Ideal for locations requiring traffic control while allowing designated vehicles to quickly pass with the use of a fire hydrant wrench. The standard hydrant nut is a 5-sided AWWA nut matching fire hydrant wrenches carried by most emergency first responders. (Other nut styles are available.)



# Standard Padlock Operated Bollard

Ideal for designated locations where traffic control is required and only authorized vehicles and personnel with the appropriate key may unlock the bollard and pass through.



# Removable Base

MaxiForce Light Removable Bollards feature a removable base to fit installation requirements. The Removable Base is designed for our light removable bollard units only and will not work with other models. This base has an 8" x 8" top plate that matches the length of a standard brick and many other commonly used pavers.





# Choice of Head Styles

The MaxiForce Light Removable line of bollards offers five head style options: two head styles for the round body bollards and three head styles for the rectangular body bollards, as shown. All bollard heads are easily removable and interchangeable.

# Easily Removable Body

While offering light security, the MaxiForce Light Removable Bollard also allows authorized personnel to move the unit easily when needed. The bollards only need to be lifted 8" to remove them from their bases completely. Once the body is removed, it leaves a flush surface that won't catch on equipment such as street sweepers or snow plows.



# Wide Variety

MaxiForce Light Removable Bollards offer numerous customization options – from the shape and size of the body, to the color and final finish of the bollard.

# TYPICAL APPLICATIONS

- Areas needing limited access
- Temporary road & alleyway closures
- Office buildings
- Apartments / residential areas School grounds
- College campuses
- Playgrounds & parks
- Shopping centers

- Public facilities
- Parking areas
- Ball Parks & Stadiums
- Biking trails
- Pedestrian walkways City downtown areas
- Government facilities

# **SIZES**

Standard Height: 28"-32" above finished surface (varies by choice of head style)

MaxiForce Light Removable Bollards are available in custom sizes according to your needs. For more information about custom orders, please contact us at:

sales@maxiforcebollards.com

TANDARD

High-Reflective White

Black Semigloss

Black Matte

Haze Grey OGF Bengal Black Glossy

Black Fine Texture

MaxiForce Bollards are available in a wide variety of powder coat colors & finishes. We also offer optional Zinc Rich Primer, Galvanization and Reflective Tape. For a full listing of our standard colors, and a look at other color options, please see Page 23 of the current catalog or visit our website







numerous customization options – from the size of the body to the color and final finish



# Multiple Body Diameters Offered

operation.

Multiple Head Styles

Standard Removables come in several sizes: From 3" to 10" - to fit your customized needs.



MaxiForce Removable Bollards offer of the bollard.

# MaxiForce Standard Removable bollards offer a high level of protection, flexibility, and superior aesthetics.

# **FEATURES**

- An optimum combination of security, flexibility, and design
- Installation details available to meet most US-based impact ratings
- Unlocks and removes quickly Engineered to only require an 8" lift to remove the bollard from the ground (standard models)
- Available in non-locking, padlocking, or key operated models
- Available in diameters from 3" through 10"
- Two base types for versatile installation (plate covered or hinge top)
- Multiple head style options
- Wide variety of sizes to fit customization needs
- Available in a wide selection of powder coat colors and finishes



MaxiForce Standard Removable Bollards are your perfect choice when it comes to combining the highest levels of protection with great flexibility and exceptional design. Engineered to minimize steel usage, our standard removable units are as light as possible and require only 8" of lifting. All bollards from this product line detach completely from their bases to open up the passage or roadway leaving a flush surface. Our Standard Removable Bollards can be offered as non-locking units, padlockable units, or in a convenient keylock version.

# TYPICAL APPLICATIONS

**Two Base Types** 

**EASY OPERATION** 

Standard Keylock

Operated Bollard

Standard Padlock

Operated Bollard

Ideal for designated locations where traffic

vehicles and personnel with the appropriate

key may unlock the bollard and pass through.

Ideal for locations that require traffic control

quickly with the use of a key. Since the locking

mechanism is built into the bollard body, there is

no risk of losing a padlock. The lock is located at

a convenient height to operate, and removes the

while allowing designated vehicles to pass

challenges associated with padlocks being

MaxiForce Removable Bollards have two base

Removable bollard operation is not affected by

options to fit installation requirements.

the choice of the base type.

covered in snow or ice. Multiple lock type

options available upon request.

control is required and only authorized

- Areas needing limited access
- Temporary road & alleyway closures
- Utility protection

Office buildings

- Educational facilities
- Playgrounds & parks
- Shopping centers

Military & Government facilities

- Parking areas
- Residential subdivisions
- Ball parks & stadiums Apartment complexes
- Biking trails
- Pedestrian walkways

City downtown areas

Playgrounds

# **SIZES**

Removable Bollard Body Standard Height: 36" above finished surface (head styles add additional height)

MaxiForce Removable Bollards are available in custom sizes according to your needs. For more information about custom orders, please contact us at:

sales@maxiforcebollards.com

TANDARD



Black Semigloss



Black Matte



Black Fine Texture

Bengal Black Glossy

We also offer optional Zinc Rich Primer, Galvanization and Reflective Tape. For a full listing of our standard colors, and a look at other color options, please see Page 23 of the current catalog or visit our website

MaxiForce Bollards are available in a wide

variety of powder coat colors & finishes.

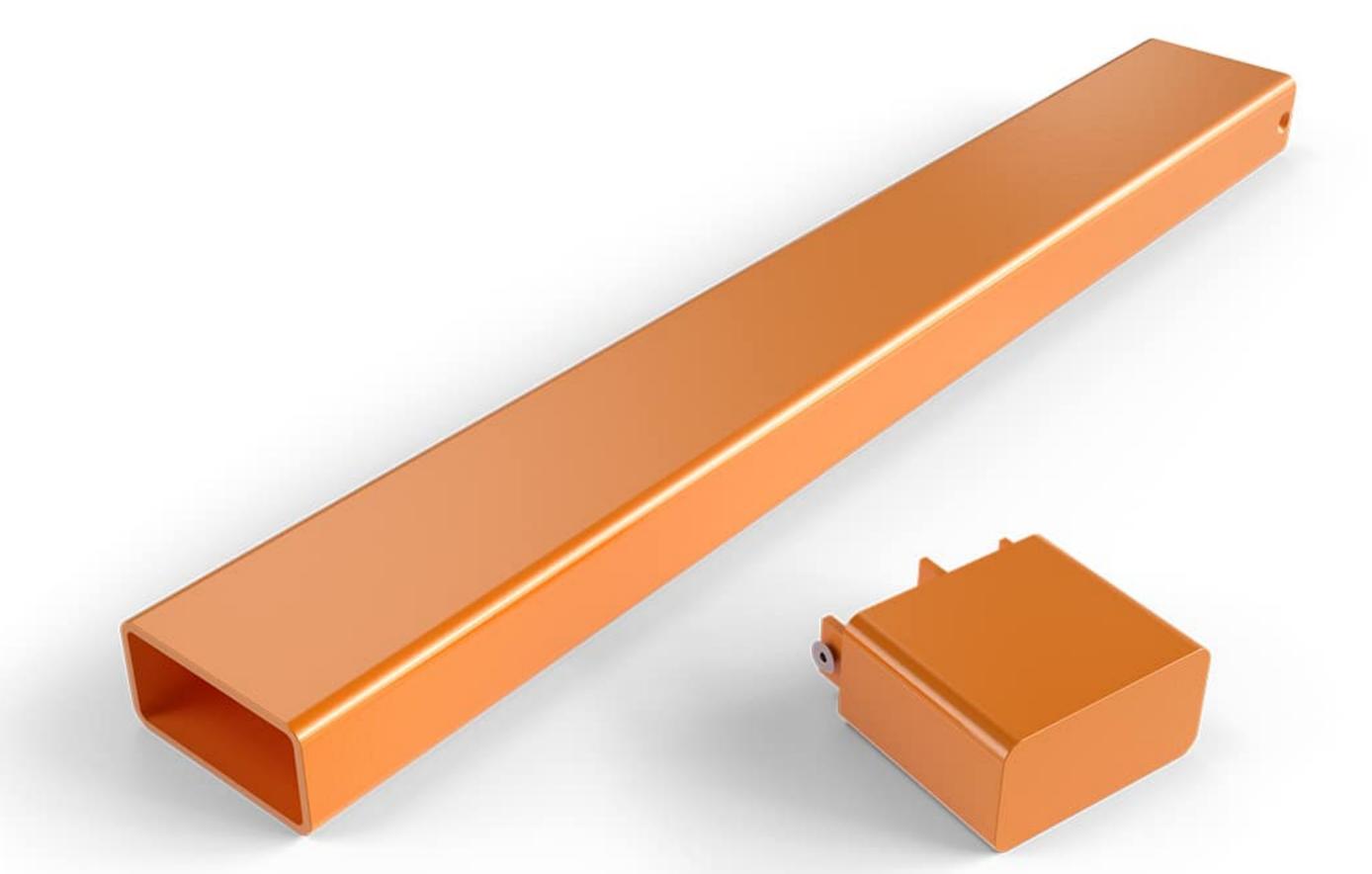


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# **FEATURES**

- The best of bollard durability and design
- Durable, fixed body, engineered to meet a variety of crash and impact ratings
- Available in diameters from 3" through 10"
- Wide variety of styles and colors to match all other MaxiForce bollard lines
- Concrete reinforceable, for additional weight and strength
- Ten different head style options
- Custom lengths, materials, and wall thicknesses available upon request
- Available in a wide selection of powder coat colors and finishes



The design of an optimal traffic control point often requires a mixture of different bollard types. Hence, MaxiForce Fixed Bollards are designed and manufactured to match the aesthetics of all other MaxiForce Bollard lines. This ensures that designers have the ability to create a uniform appearance at all passages and roadways. MaxiForce Fixed Bollards can also be used where permanent traffic control is required. The removable tops also allow these units to be filled with concrete to increase their weight and strength, while maintaining a finished appearance.

# **CONVENIENT INSTALLATION**



# Standard Fixed Installation

MaxiForce Fixed Bollards are produced as single, factory-complete units that are delivered completely assembled. The fixed bollards are installed directly into the ground without the need for a mounting base.



# Concrete Reinforced Installation

Some MaxiForce Fixed Bollard head options are removable, allowing the units to be concrete-filled for additional weight and strength when the installation calls for it. Once filled, the bollard heads can be reinstalled, covering the concrete filling and restoring the bollard's original aesthetics.

# Easy Installation

MaxiForce Fixed Bollards do not require the use of bases for installation purposes. The MaxiForce Fixed Bollards are installed directly into a concrete foundation.



# Multiple Head Styles

The MaxiForce Fixed line of bollards offers ten head style options: seven head styles for the round body bollards and three head styles for the rectangular body bollards, as shown. Head styles are available in bolt on and welded on styles. All bolt on styles are removable and interchangeable. \*Note: Head style options vary based on bollard diameter.

# **Durable Fixed Body**

All MaxiForce Fixed Bollards feature a durable, fixed body that is engineered and manufactured to last. Bollard bodies are available in rectangular shape, and in round sizes ranging from 3" up to 10". Custom lengths and wall thicknesses are available upon request.



# Wide Variety

MaxiForce Fixed Bollards offer numerous customization options – from the shape and size of the body to the color and final finish of the bollard.

# TYPICAL APPLICATIONS

- Crowd or building protection
- Storefronts
- Sidewalks Permanent utility protection
- Office buildings
- Educational facilities
- Playgrounds & parks

Military & Government facility

- Permanent road closures
- Commercial buildings
- Parking areas
- Malls & shopping centers
- Residential subdivisions
- Ball parks & stadiums
- Apartment complexes Biking trails
- City downtown areas

# **SIZES**

Rectangular Fixed Bollard Standard Height: 32" above finished surface

Round Fixed Bollard Body Standard Height: 36" above finished surface (head styles add additional height)

MaxiForce Fixed Bollards are available in custom sizes according to your needs. For more information about custom orders, please contact us at:

sales@maxiforcebollards.com

TANDARD

Black Semigloss

High-Reflective White

Black Matte

Haze Grey OGF Bengal Black Glossy

Black Fine Texture

MaxiForce Bollards are available in a wide variety of powder coat colors & finishes. We also offer optional Zinc Rich Primer, Galvanization and Reflective Tape. For a full listing of our standard colors, and a look at other color options, please see Page 23 of the current catalog or visit our website



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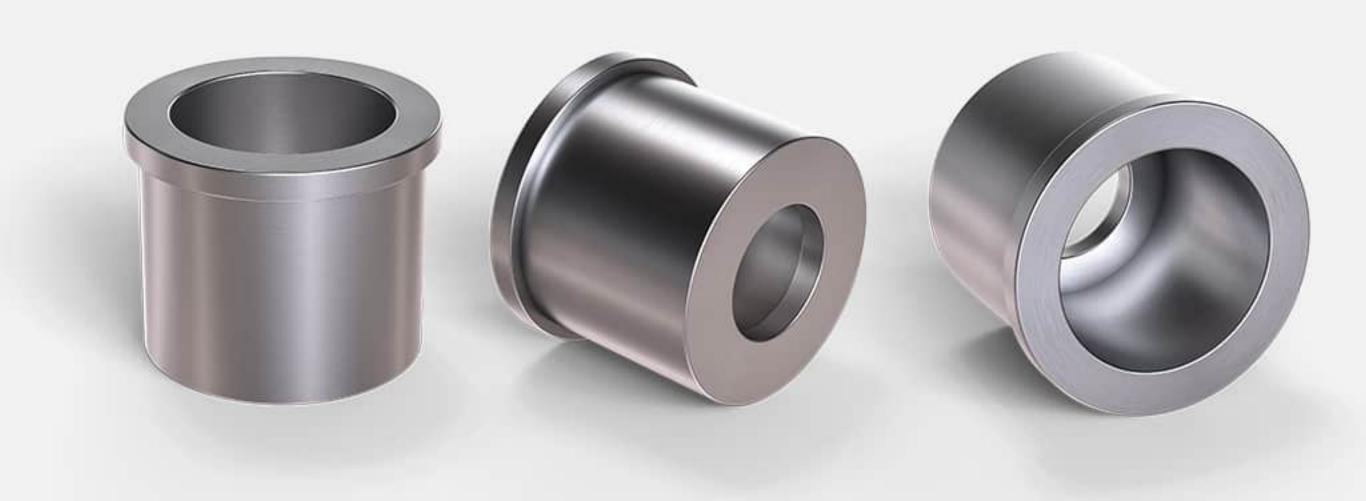
# COMMON OPTIONS AND ACCESSORIES

MaxiForce offers a variety of bollard accessories to modify and enhance your bollard installation. We also offer many replacement parts to aid you with the operation and maintenance of the bollards. From release inserts to reflective tape, you'll find everything you need to customize, upgrade, and maintain your bollards, while fulfilling your specific requirements.

Below is a selection of our most commonly requested MaxiForce accessories and replacement parts. For a complete listing of the accessories and parts available, please request more information at sales@maxiforcebollards.com or visit our online shop at www.maxiforcebollards.com

# MAXIFORCE COLLAPSIBLE BOLLARD RELEASE INSERTS

MaxiForce collapsible bollard release inserts are available in four versions: standard, heavy-duty, steel, and non-breakaway. These various inserts provide you with choices to suit the operational needs and the particular conditions of your location. All MaxiForce collapsible bollards come equipped with your choice of release inserts, and the inserts are also available for purchase separately, as replacement parts.



# Standard Insert (P-145)

The standard insert is an aluminum insert that allows the unit to breakaway in lieu of damaging the bollard. This is the standard release insert provided with a MaxiForce collapsible bollard if no other type is requested.

Heavy-Duty Insert P-150

The heavy-duty insert is a heavier aluminum insert that allows the unit to breakaway in lieu of damaging the bollard. This insert is designed to offer more resistance than the standard insert, making it more difficult to breakaway.

# Steel Insert P-151

The steel insert requires a more substantial force to breakaway the unit than the two aluminum inserts.

# Non-Breakaway Insert P-152

The non-breakaway insert is a steel insert, which removes the breakaway capability of the bollard and will likely cause damage to both the bollard and the vehicle if struck.

# **SE BOLLARD LIFTING HANDLES**

MaxiForce bollard lifting handles can be attached to almost any MaxiForce bollard. The handles can be used to support bike parking or to assist in the easy and safe manual lifting of MaxiForce Removable Bollards. Handles are available in different sizes and locations, based on your needs.







# MAXIFORCE HYDRANT WRENCHES

The MaxiForce branded cast aluminum hydrant wrench is designed to fit our standard hydrant nut (1-3/8"). We include one wrench with every 10 wrench operated bollards in an order (collapsible or removable).

Additional wrenches are available for purchase.



# **EYE HOOKS**

Eye hooks allow you to fasten connecting chains to bollard surfaces in order to manage vehicles and pedestrian access. Eye hooks are welded to the body of the bollard and can be located anywhere on the bollard, based on your individual requirements.



# REFLECTIVE TAPE

High Intensity Reflective Tape, providing enhanced visibility of your bollards, is available for application on all MaxiForce bollard models. The tape is available in various colors and widths, upon request.



## DOUBLE SIDED LOCKING PIN

All padlockable MaxiForce bollards feature a one-sided locking pin as a standard (allows for attaching a single padlock). For padlock operated units where more than one lock is required, MaxiForce offers a double sided locking pin. This allows for two padlocks to be used on each unit. One lock is typically keyed for the end-user and the other is keyed for either a separate end-user group or local authorities.



# **HYDRANT NUTS**

MaxiForce wrench operated bollards (collapsible or removable) are equipped with our standard 1-3/4" hydrant nut. Other sizes of hydrant nuts are available, upon request.



# COMPARISON CHART

Which bollards are best for your needs?



| FEATURES                     |  |  |
|------------------------------|--|--|
| Breakaway Feature            |  |  |
| Removable Body               |  |  |
| Head Choice                  |  |  |
| Base Choice                  |  |  |
| Body Style Choice            |  |  |
| Padlock Operation            |  |  |
| Hydrant-Wrench Operation     |  |  |
| Multiple Diameters Available |  |  |
| Custom Heights Available     |  |  |
| Custom Colors Available      |  |  |
| Custom Finishes Available    |  |  |
| Impact Ratings Available     |  |  |
|                              |  |  |

- Emergency access in life safety applications
- Easy repair &
- maintenance
- Fast & easy operation Great durability
- Superb functionality
- & design Great choice of colors & finishes
  - Great choice of sizes,
- Fire lanes & alleyways
- Emergency entrances
- Bike trails & trailheads Office buildings
- School grounds
- College campuses · Playgrounds & parks
- Shopping centers
- Public facilities
- & MORE
- Areas needing limited
- - Playgrounds & parks

  - & MORE

- Temporary road &

Can be used in multiple

standard bollards of the

Easy operation

same size

Great durability

Appealing design

colors & finishes

Lighter lifting than

Easy maintenance

- alleyway closures Office buildings
- · Apartments/residential
- School grounds
- College campuses
- Shopping centers Public facilities

Areas needing limited

Easy operation

Great durability

Easy maintenance

Appealing design

Great choice of sizes,

colors & finishes

Extra security

- Temporary road &
- alleyway closures
- Temporary serpentines
- Utility protection
- Office buildings
- Educational facilities Playgrounds & parks
- Military & Government facilities
- & MORE

Crowd or building

Highest level of securityCost-effective

No maintenance

Matches operable

Appealing design

Great choice of sizes,

colors & finishes

Great durability

bollard styles

- protection Storefronts
- Sidewalks
- Permanent utility protection
- Office buildings
- Educational facilities
- Playgrounds & parks Military & Government

### facilities & MORE

# INSPIRATION



# PROFESSIONAL SPORTS STADIUM & CONCERT/EVENT VENUE

## Location: Maryland

### **Bollard Solution:**

26 MaxiForce Fixed, Engineered Crash Rated Bollards Model: MaxiForce MFRN-RS5-N6

Color: Customized - RAL 9019

8 MaxiForce Removable Bollards
Model: MaxiForce MRHP-RS5-HD6
Color: Customized - RAL 9019

This professional sports stadium and concert/event venue in Maryland features a seating capacity of over 80,000 on five levels and hosts numerous events attracting millions of visitors annually. On a scale like this, a

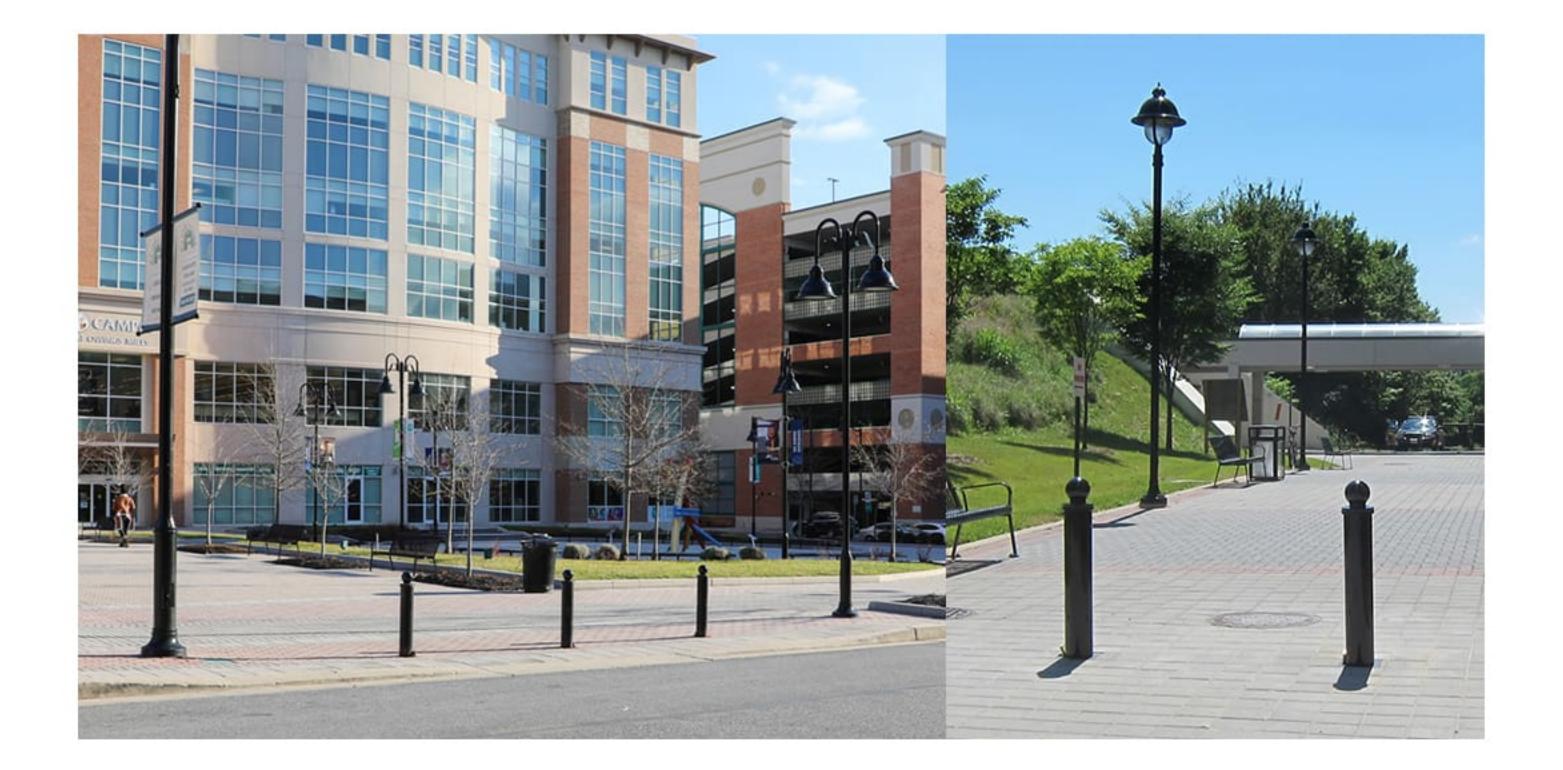
significant concern for the owner / operator of the stadium is the guests' safety and enjoyment of the gameday or event experience. During a recent phase of facility renovations, the owner/operator decided to upgrade some of their physical security features including some of the site furnishings around the venue.

Formerly placed lines of concrete "Jersey" style barriers were removed and substituted with a more functional and aesthetic bollard solution. To assure the safety and security of all visitors, the general contractor (Concentric Security, LLC.) chose a MaxiForce bollard solution, including both fixed and removable units. The project required an engineered crash rating on both the fixed and removable bollards and the stadium operator was adamant that the siteline of the product should remain consistent across all installed products. MaxiForce was able to provide a PE stamped/sealed engineered crash rating, the same aesthetic design for both the fixed and the removable bollards, and also was able to match the custom color palette for the site.

"This project had an extremely tight budget and a very short window to be completed in. MaxiForce did an amazing job of providing nearly real-time design support, fabricating the products in a much faster than industry-standard lead time, and was also available during installation to answer any questions that came up. Largely due to the efforts of the MaxiForce team, the customer now has a durable, functional, and safe solution that they are confident will protect their crowds and their facility for years to come." shares David Wachs, President, Concentric Security, LLC.

"MaxiForce is our 'go to' choice when we want our clients to have the best experience possible."

DAVID WACHS
PRESIDENT OF CONCENTRIC SECURITY



# METRO CENTRE AT OWINGS MILLS

Location: Owings Mills, Maryland

### **Bollard Solution:**

13 MaxiForce Removable Bollards
Model: MaxiForce MRRP-RS1-R
Color: Bengal Black

Metro Centre at Owings Mills is the first mixed-use Transit-Oriented Development in Baltimore County, incorporating all aspects of an active, modern lifestyle into a single location. Situated in the heart of Owings Mills, Metro Centre offers Class "A" commercial office space, retail space, residential units, educational facilities, a full-service hotel, and year-round special events.

To assure the safety and security of the campus, while also providing fast and convenient access for authorized personnel, the property management selected MaxiForce Removable Bollards, model MRRP-RS1-R. "Some of the bollards are located onsite in the alleys between commercial and residential buildings and are often removed for move-ins, move-outs or deliveries," shares the General Manager of David S. Brown Enterprises. "We have chosen to use the MaxiForce Bollards because of their flawless design and durability, but also because they allow for authorized personnel to move them easily when needed."



# MUNICIPAL IMPROVEMENT

# Location: Colorado

## **Bollard Solution:**

MaxiForce Collapsible Bollards
Models: MaxiForce MCSW-SS1-EZ &

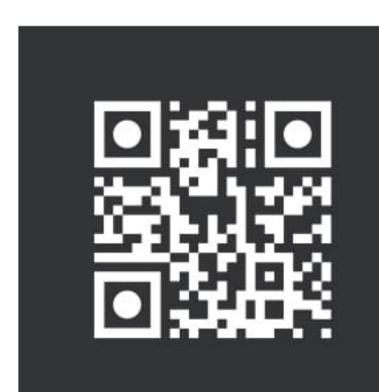
MaxiForce MCSW-SS1-S

Color: Safety Yellow

This bustling municipality, located in Colorado, is the homeplace of more than 60,000 people and is a busy tourist destination, due to its romantic history, impressive art collections, beautiful parks, and natural areas. To ensure the safety and security of both residents and tourists, while also providing fast access in case of any emergency situations, the local authorities have implemented the installation of MaxiForce collapsible bollards across key locations all over the city.

The collapsible model selected ensures safety and protection, while allowing authorized personnel to control, re-route, or grant quick access to meet the city's traffic flow requirements. All MaxiForce Collapsible Bollards

feature the unique and patented breakaway system, which allows emergency access without damaging the bollard or the vehicle. This saves valuable time for the local first responders when incidents occur. The selected design and final finish of the bollard solution blends perfectly with the romantic appearance of the city, offering residents and tourists safety and security with style.



For more MaxiForce Projects,
Photos and Inspiration please visit
www.maxiforcebollards.com
or scan the QR code.

# ULTIMATE GUIDE FOR PROFESSIONALS

# 1 Choosing the right type of MaxiForce Bollard

Choosing the right bollards can be a complicated task, especially considering the number of choices available on the market. MaxiForce offers an extensive range of **more than 50 unique bollard configurations** and in addition, we are capable of customizing products to match your individual needs.

Before choosing your bollard solution though, we advise you to consider carefully what you expect from your bollard - in terms of durability, functionality, and design. Consider what the bollard's main function will be and where it will be installed.

For a better understanding of the functionalities and benefits of each product line that we offer, please check out our comparison chart on Page 18. Should you need any assistance or advice on choosing the right type of bollard, please don't hesitate to contact us at:

sales@maxiforcebollards.com or +1 (410) 552 9888

# Compliance with Industry Codes & Standards









All MaxiForce products, material content, and manufacturing processes are in compliance with industry codes, standards, and performance-based measures. In addition, we always offer a complimentary consultation service that supports your LEED certification efforts. For the full list of compliances, review www.maxiforcebollards.com/resources

# Bollard Sizes

MaxiForce Bollards come in the following standard sizes:

# Collapsible Bollard Standard Height: 32" above finished surface / above grade

# Light Removable Bollard Standard Height:

28"-32" above finished surface / above grade (varies by choice of head style)

## Standard Removable Bollard Body Standard Height:

36" above finished surface / above grade (head styles add additional height)

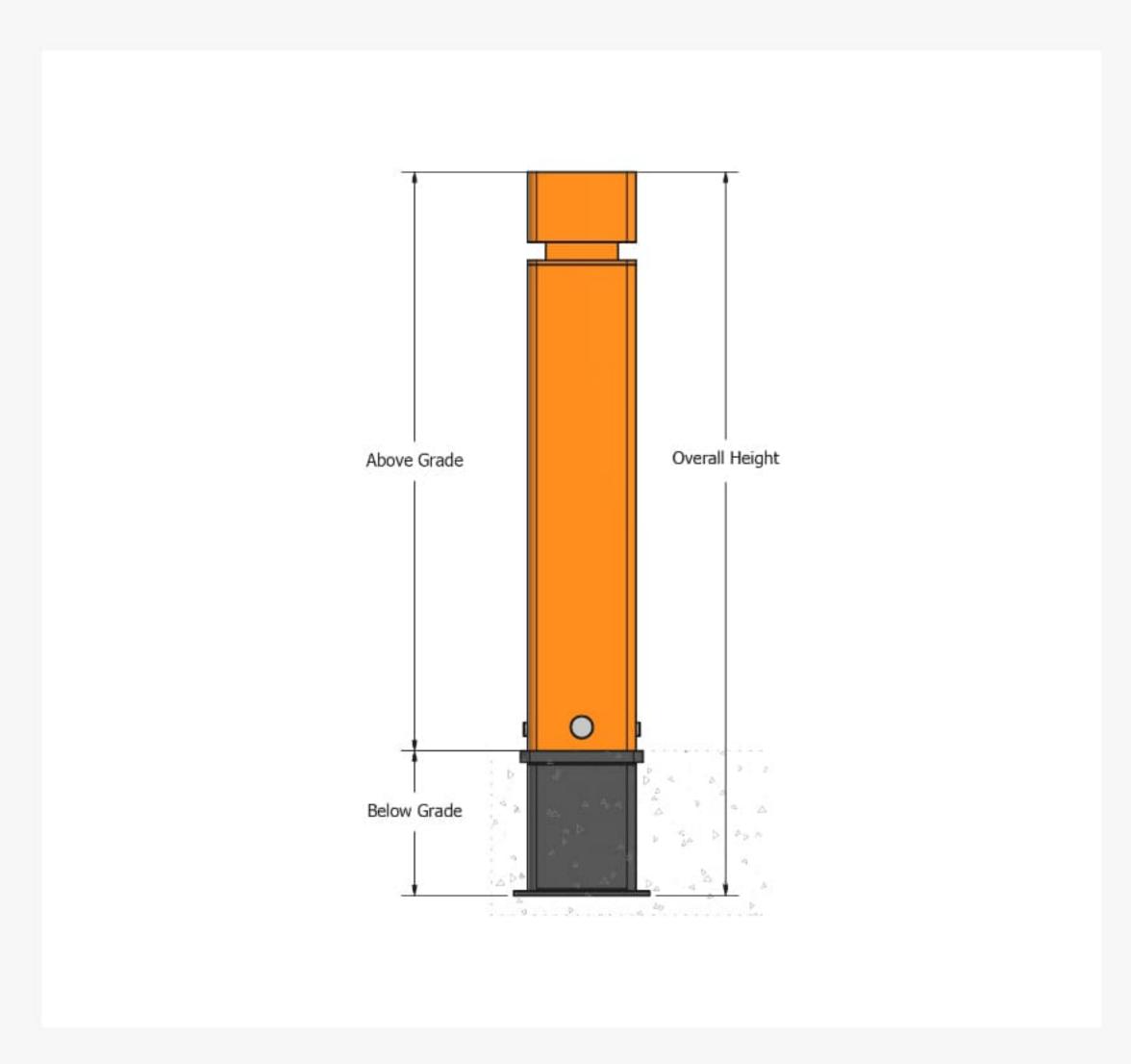
## Fixed Bollard Standard Height (rectangular body):

32" above finished surface / above grade

## Fixed Bollard Body Standard Height (round body):

36" above finished surface / above grade (head styles add additional height)

For more information regarding exact size details of specific models, please check our technical documentation library (CAD drawings) at: www.maxiforcebollards.com/resources/ or contact us at sales@maxiforcebollards.com or +1 (410) 552 9888

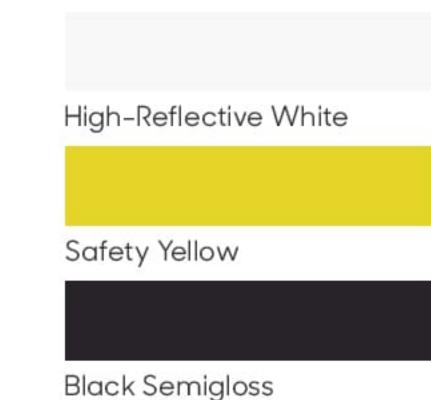


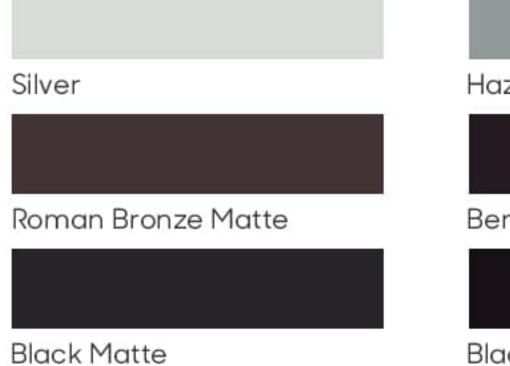
Most MaxiForce Bollards are also available in custom lengths, diameters, and wall thicknesses, according to your specific needs. For more information about custom orders, please contact us at: sales@maxiforcebollards.com

# Bollard Colors & Finishes

MaxiForce Bollards come in a wide variety of over 80 colors and finishes to ensure a perfect blend into your project and landscape.

# TANDARD







# POPULAR SPECIAL COLORS











All MaxiForce products are powder coated with powder from the TIGER Drylac line of powder coatings. For full-color charts, please visit www.maxiforcebollards.com/resources or contact us at sales@maxiforcebollards.com/

**NOTE:** While TIGER Drylac is careful to match colors and textures as closely as possible in their color charts, differences in display types when viewing electronically and paper and ink limitations when printing may account for differences from actual coatings. To aid in final product selection, please contact us or your local TIGER Drylac office for a powder-coated sample panel of the product of your choice.

# Warranty Conditions

MaxiForce warrants that the products sold with this catalog will conform to the applicable specifications and will be free from defects in material and workmanship for one (1) year after shipment FOB under normal and proper use and service. For full warranty conditions and warranty limitations, please visit www.maxiforcebollards.com/resources

# **10** Technical Drawings & Specifications

All of our technical documentation and drawings are available for download on **www.maxiforcebollards.com/resources** Visit our online resource library by following the link above or simply scan this QR code to access our documentation.



# Ordering

To place an order with MaxiForce, please use our online order form at www.maxiforcebollards.com or contact us at sales@maxiforcebollards.com or +1 (410) 552 9888

# Additional Information

Should you have any questions or need advice, don't hesitate to contact us at: sales@maxiforcebollards.com or +1 (410) 552 9888