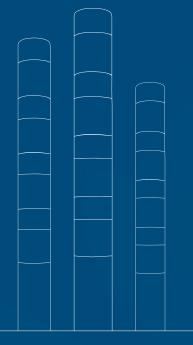


# DEFLEX Delineators, Bollards and Chicanes



DEFLEX
Delineators

Protection Traffic Control Safety Zones Speed Control Crosswalk School Zone

Decorative & Steel Bollard Safety Channelizing Pedestrian Protection

Bike Path Chicanes Bicycle Path Speed Control



# Visual Communication A color for each applications



|                 | Pages | Products                              |
|-----------------|-------|---------------------------------------|
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DEFLEX Series Features













# City's Best Traffic Calming Device

#### 360°

83 mm

51 mm

2,00"

76 mm 3,00" year waranty

Visible and flexible from all angles. No orientation required upon installation.

### Height 48"

The distance between a truck driver's eyes and his headlights requires a high visual marker. At a height of 48" - 1200mm, the Deflex provides maximum safety with proper visibility for all types of vehicules.

With the Deflex, road markings are vertically extended improving road channelizing efficiency, especially in congested traffic. Cyclists and pedestrians feel safer from motorists with a higher channelizer.

### Reflective Stripes

The embedded reflective stripes provide a longer life and improve safety expectancy upon multiple impacts.

This High level of reflectivity (ASTM Type IV) and its diameter of 3.25" (83 mm) increases visibility at night.

#### NTPEP TESTED

200 vehicle impacts tested

#### NCHRP-350

Standard Certification

### Monohull (One Piece)

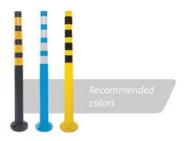
No mechanical parts means easy maintenance. Less components on the roads if damaged.

5





# Parking Lot Delineator



Our DEFLEX flexible parking lot delineator highlights parking areas with visual markings to improve management and driver experience. Different colors help identify reserved parking spaces for the disabled, families, pregnant women and employees, among others.

Made of flexible Polymer

Easy Installation



Seasonal Installation



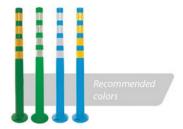






Green DEFLEX Awareness

### Bike Lane Delineator



Made of flexible Polymer

Easy Installation on Multiple Surfaces



This high-performance Deflex flexible delineator for bike lanes is a durable marker to set boundaries on the road. Safer than a rigid delineator and clearly visible day and night, it has been designed for the safety of the most vulnerable road users.

Lightweight and resilient, the 48" Deflex delineator is made of a treated polymer blend to withstand harsh weather and vehicle impacts, and keeps its shape after as many as 200 impacts at 55 mph/88 km/h. 48" is the best height for being visible by all road users the bike Deflex 48 is a great traffic calming tool for the benefit of Vision Zero.

Clear and Safe Lane Marking









## Retractable Belt Delineator



Clear crowd channelizing is critical to holding successful public events and our DEFLEX crowd control delineator is the perfect tool to create passages and limit areas. With a height of 1200 mm (48"), variable installation options and quick installation, the Deflex delineator is the ideal tool to achieve efficient crowd control.

Made of flexible Polymer

Easy Installation



Manage Waiting Lines









Orange DEFLEX

### Road Works Delineators



Our DEFLEX flexible channelizer delineator post for road work zones is a popular tool to control traffic when space is limited in areas where construction occurs. It stands four (4) feet tall and is notably thin in profile. It is made of a treated polymer blend that is flexible when struck by vehicles and resistant to bad weather.

The Deflex delineator is highly visible from all directions, day or night. It can be bolted in place or moved at will.

#### Day and Night Visibility



Easy Installation on standard posts



Increases Driver Awareness





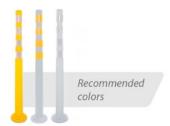




Yellow DEFLEX Awareness

# Lane Divider and Road Marking

Delimitation of the approaches to obstacles such as protrusions and bypass islands, and accentuation of road markings such as hatching at motorway entrances and exits and dangerous curves.



Increase Safety in Curves

Prevents Line Crossing



Improve Visibility



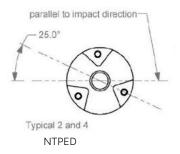
Visual Channelizing

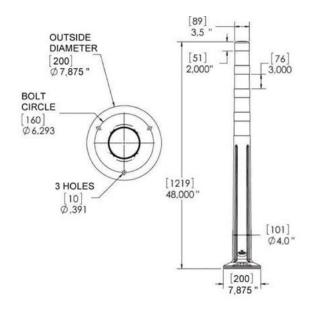






The Deflex delineator post is made of a flexible polymer and regains it's original shape even after more than 200 impacts. at 55 mph / 88 km/h with asphalt shield installation according to NTPED test Results you will achieve or exceed 200 impacts or more if installed as per this pattern.





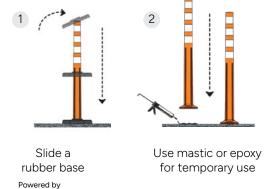
# Suggested Spacing between delineators Bike Path

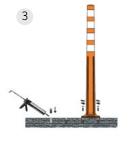
| Speed<br>Limit         | Lane Divider <i>without</i><br>concrete lane path divider |             | Lane Divider <i>without</i><br>concrete lane path divider |             |
|------------------------|-----------------------------------------------------------|-------------|-----------------------------------------------------------|-------------|
|                        | Straight Lane                                             | Curved Lane | Straight Lane                                             | Curved Lane |
| 20<br>KM/H  SO<br>KM/H | 60' (20 m)                                                | 30' (10 m)  | 30' (10 m)                                                | 15' (5 m)   |
| 25<br>KM/H             | 60' (20 m)                                                | 30' (10 m)  | 30' (10 m)                                                | 15' (5 m)   |
| 30 50 KM/H             | 60' (20 m)                                                | 30' (10 m)  | 30' (10 m)                                                | 15' (5 m)   |

Center to Center

Center to Center

#### How to Install





Use mastic or epoxy for temporary use

| Speed<br>Limit         | Roadwork<br>and Lane Divider |             |  |
|------------------------|------------------------------|-------------|--|
|                        | Straight Lane                | Curved Lane |  |
| 20 30 KM/H             | 15' (5 m)                    | 15' (5 m)   |  |
| 25 40 KM/H             | 15' (5 m)                    | 15' (5 m)   |  |
| 30<br>KM/H             | 30' (10 m)                   | 15' (5 m)   |  |
| 35<br>км/н 60<br>км/н  | 30' (10 m)                   | 15' (5 m)   |  |
| 40 70<br>км/н          | 30' (10 m)                   | 15' (5 m)   |  |
| 50<br>км/н 80<br>км/н  | 45' (15 m)                   | 15' (5 m)   |  |
| 55 90<br>км/н          | 45' (15 m)                   | 15' (5 m)   |  |
| 60<br>KM/H 100<br>KM/H | 60' (20 m)                   | 15' (5 m)   |  |

Center to Center

# Installation Options

#### Mobile

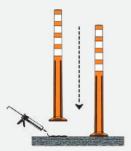


Slide a rubber base



Weight of 16 lbs (7kg)
Made of recycled rubber
Ergonomic handle
16" x 18,5" x 2,188"
(406 x 470 x 56 mm)

#### Temporary



Use mastic or epoxy for temporary use



Sticky Mastic for asphalt or concrete. Steel plate included 8" x 8" x 0,250" (203 x 203 x 6 mm)

#### Seasonal or permanent in asphalt



Use mastic or epoxy for temporary use



Galvanized steel ground spike 8" x 8" x 16" (203 x 203 x 406 mm)

#### Seasonal or permanent in asphalt



Use a drop of epoxy, shield and bolt



M10 Threaded shield for asphalt or concrete. Comes with 3 threaded caps to protect holes during the downtime

# Permanent concrete border

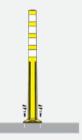


Bolt into a concrete border



3/8-16 x 2,5" zinc plated concrete screws for permanent installation

# Permanent in concrete



Bolt into concrete



3/8-16 x 2,5" zinc plated concrete screws for permanent installation

#### Easy-in, Easy-out



Insert the adapter into the sleeve



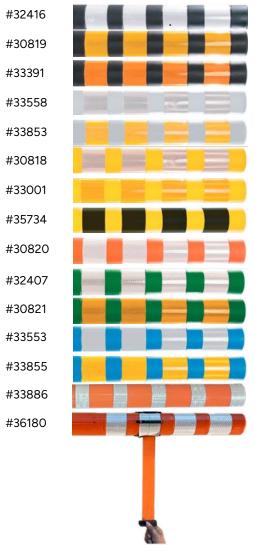
Steel Sleeve anchor 8", 22" or 36" in length (200, 550 or 900 mm) (Carvelle System)





# Parts # to order **DEFLEX** system

# 1 Select Color

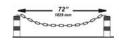


#### 2 Add Accessories

#35727 Black / Yellow Plastic Chain



#35728 Yellow Plastic Chain



#37851

Circular Clamp assembly with Plastic Chain (6.5' / 2m)



#35727

Eyelet Cap assembly with Plastic Chain and accessories (6.5' / 2m)



#### 3 Installation Kit

Hexagonal rubber base for Retractable Belt DEFLEX



#33769 **Rubber Base** 



#32410

Sticky Mastic / Plate



#35199

Asphalt Shield & bolts



#33869 **Ground Spike** 



#35198 Concrete Screws



#35742





#33069 Sleeve Adaptor



#34007

Concrete Sleeve Anchor



Asphalt Sleeve Anchor





**Ground Sleeve Anchor** 

#30924

Sleeve Adaptor Extractor



Minimum Order 50 units Pallet 42 x 46 x 26 in 1100 lbs



**Black DECOFLEX Awareness** 

# DECOFLEX, Flexible Decorative Bollard

Elegant and stylish, the DecoFlex flexible decorative bollard adds a touch of prestige in locations where flexible bollards are needed, namely curb extensions and sidewalk ledges, lane closure and even channelized lanes.

Made of flexible Polymer

Easy Installation







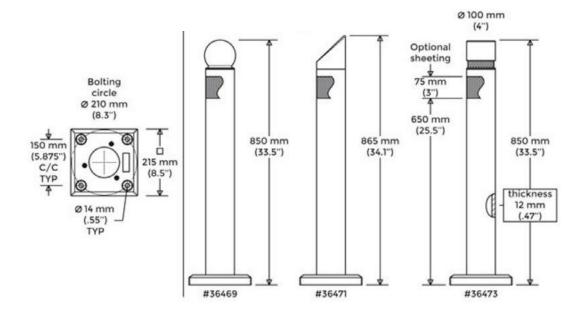






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# DECOFLEX Flexible Decorative Bollard



| Products |                                                                                                                                                                                 | Box Size - Weight                             | HSS Code |
|----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------|----------|
| į        | Assembly Kit # 36469 100mm dia. x 34" BLACK DecoFlex Flexible Decorative Bollard, BALL Top c/w Square Base and Hardware 100mm dia. x 34"                                        | Box of 5 units :<br>37 x 28 x 11 in – 450 lbs | 3926.90  |
| 1        | Assembly Kit # 36471 100mm dia. x 34" BLACK DecoFlex Flexible Decorative Bollard, MITTERED Top c/w Square Base and Hardware 100mm dia. x 34"                                    | Box of 5 units :<br>37 x 28 x 11 in – 450 lbs | 3926.90  |
| İ        | Assembly Kit # 36473 100mm dia. x 34" BLACK DecoFlex Flexible Decorative Bollard, COLUMN/CYLINDRICAL Top c/w Square Base, Hardware 100mm dia. x 34" & White Reflective Sheeting | Box of 5 units :<br>37 x 28 x 11 in – 450 lbs | 3926.90  |
|          | Options # 36879 DecoFlex CONCRETE Bolt-In Installation Kit                                                                                                                      | Box of 40 units :<br>11 x 17 x 4 in – 20 lbs  | N/A      |
|          | Reflective Sheeting White #36542                                                                                                                                                | N/A                                           | N/A      |
|          | Reflective Sheeting Yellow #36543                                                                                                                                               | N/A                                           | N/A      |



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**BOLLARD Series** 

# BOPS-MC 5.5" Deco Steel Bollard

Often used in new layouts, the BOPS-MC protective safety steel bollard provides adequate protection for a sidewalk projection to ease traffic. From an aesthetic point of view, it is also used to delimit a zone reserved for pedestrians while remaining inaccessible to vehicles.

The safety bollard is installed in concrete (on a concrete sidewalk projection) to be a installed with a 450 mm (17.7") steel carvel sleeve.

Improve Visibility

Easy Installation



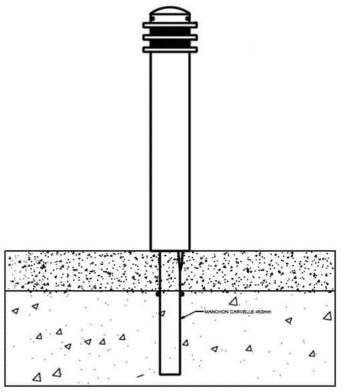






BOPS-MC 5.5" Deco Steel Bollard





| Products                                                    | Box Size - Weight    |
|-------------------------------------------------------------|----------------------|
| Assembly Kit # 36127                                        |                      |
| Decorative Bollard BOPS, 5.5" x 34" Stell, c/w Cap, painted | 34 x 5.5 in – 63 lbs |
| textured black (Fixing system not included)                 |                      |
| Assembly Kit # 37482                                        |                      |
| Fixing system – Inner post for Carvel                       | Call for info        |
| Sleeve Anchor                                               |                      |
| Option # 30708                                              |                      |
| Track spike .375 X 3" steel                                 | Call for info        |
| Option .                                                    |                      |
| 300 mm Carvel Sleeve Anchor                                 | Call for info        |
| Option                                                      |                      |
| 450 mm Carvel Sleeve Anchor                                 | Call for info        |
|                                                             |                      |

BOLLARD Series Awareness

# BOC 6" Carvel Bollard

The 6-inch steel bollard with reflectors is a tough and sturdy visual marker to block traffic from forbidden areas. Made of powder-coated galvanized steel, the BOC648 has four (4) recessed reflective sheeting stripes that provide high visibility day and night.

Easy to install, it is inserted in the sleeve anchor (see the corresponding product page for details) and is as easily removed if needed, using the extractor tool. This 6" bollard is ideal for both temporary and permanent installation where vehicles are prohibited. Available in black with white or yellow reflective sheeting.

Blocks Vehicle Access Easy Installation

Tough and Sturdy







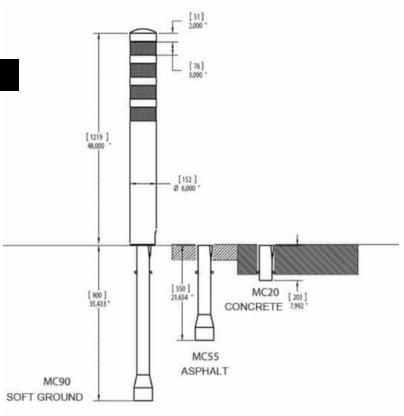






# BOC 6" Carvel Bollard

| Features          |                                 |
|-------------------|---------------------------------|
| Materials         | Steel ASTM A500                 |
| Rust protection   | Hot-dip galvanised              |
| Finish            | Powder coated painted           |
| Color             | Black                           |
| Reflective Stripe | 3" White or Yellow ASTM Type IV |
| Height            | 48" (1220 mm)                   |
| Bollard diameter  | 6" (152 mm)                     |
| Weight            | 50 lbs (23 kg)                  |



| Products |                                                           | Box Size - Weight  |
|----------|-----------------------------------------------------------|--------------------|
| :        | Assembly Kit # 30326                                      |                    |
| =        | Carvel Bollard 6" (150mm) x 48" (1220mm) Galvanised Steel | 6 x 48 in – 50 lbs |
| ı        | & Black painted c/w 4 White reflective bands              |                    |
| •        | Assembly Kit # 30327                                      |                    |
| =        | Carvel Bollard 6" (150mm) x 48" (1220mm) Galvanized Steel | 6 x 48 in – 50 lbs |
| i        | & Black painted c/w 4 Yellow reflective bands             |                    |
|          | Option # 30708                                            |                    |
|          | Track spike .375 X 3" steel                               | Call for info      |
|          | Option                                                    |                    |
|          | 200mm Carvel Sleeve Anchor (Concrete Installation)        | Call for info      |
|          | Option                                                    |                    |
|          | 550mm Carvel Sleeve Anchor (Asphalt Installation)         | Call for info      |
|          | Option                                                    |                    |
|          | 900mm Carvel Sleeve Anchor (Ground Installation)          | Call for info      |
|          | Section Survey and its control (Section installation)     |                    |

CHICANE Series Zone Awareness

# Bike-CHSX Simple Bike Lane Chicane

Designed for cyclist safety near crossroads, the Bike-CHSX bike lane chicane makes an obstacle and creates a choking effect on the pathway, which together force cyclists to slow down. Made of powder-coated galvanized steel, chicanes are heavy duty, vandalism-proof and weatherproof.

Every chicane is equipped with a locking system that keeps it either in closed position or opened position for maintenance or emergency situations.

Improve Visibility Reduces Speed

Open in case of emergency





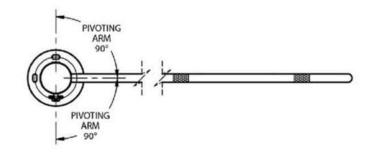






### Chicane

| Features        |                                                                                   |
|-----------------|-----------------------------------------------------------------------------------|
| Materials       | Structure: Powder coated Galvanized<br>Steel Sheeting: Diamond grade,<br>type III |
| Standard colors | Structure: Black, Textured Finish<br>Sheeting: Yellow or White                    |



Products



Decorative Base dia. 150 x 280 mm #30689



Steel Buried Base Chemical Anchor dia. depth 1.4 m (55") #32371



Chemical Anchor dia. depth 1.4 M (55") #32371 3/4" X 9,6" #37596 (4)



Stainless Steel Padlock #37160

# Visibility and safety on bike lanes

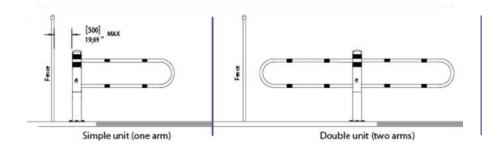
The reflective sheeting help locate the chicane in the dark. Installed near crossroads, the CHSX decorative chicane for bike paths effectively helps reduce speed and improves safety of every user.

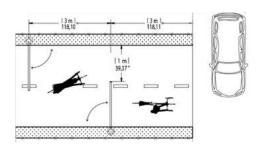
#### Recommended Use

Bike path chicanes are in the first place intended to mark a potentially dangerous crossroad, then to make cyclists reduce their speed before actually crossing. The use of chicanes is recommended for all bike paths that are not directly on the side of the road. Besides, if the point is to block passage to cars and ATVs, it is recommended to install concrete bollards instead.

#### Recommended Installation

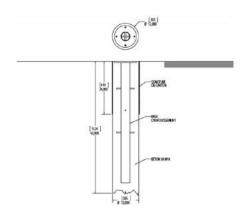
First of all, it's important to leave a minimum clearance space of 3 m before the cross-road. This is to allow cyclists to get off their bike. Secondly, keep units about 3 m apart. This is to facilitate the passage of kid trailer equipped bikes. Finally, leave a 1 m clearance width on the bike path, to create the aforementioned choking effect which will force cyclists to slow down before entering the chicane.





To avoid cyclists bypassing the chicanes, it is advised to install units near a fence or any kind of barrier by a maximum of 0,5 m. If the fence is too far away from the bike path or is simply non-existant, double units (with 2 arms) are to be used instead. They will fill the gap and prevent any possible bypassing.

#### Installation



Two methods can be used to secure units to the ground. If a concrete slab is already made, only four (4) chemical anchorings of dia. 3/4" x 9,6" are needed for installation.

For installations on asphalt or lawn, a concrete cylinder (sonotube-type) reinforced with a buried base will be needed for maximum strength. Just dig a cylinder of 305 mm (12") of diameter and 1524 mm (60") deep, pour in 30 MPa concrete and insert the buried base while keeping in mind the intended vertical orientation.

| Products |                                                                                                                               | Box Size - Weight |
|----------|-------------------------------------------------------------------------------------------------------------------------------|-------------------|
|          | Assembly Kit # 37112 1,6 m Simple Steel Swivel barrier for Bike path Black painted White or Yellow reflectives bands          | Call for info     |
|          | Assembly Kit # 37111 2,2 m Simple Steel Swivel barrier for Bike path Black painted White or Yellow reflectives bands          | Call for info     |
| ı        | Assembly Kit # 37113 3,2 m Simple Steel Swivel barrier for Bike path Black painted White or Yellow reflectives bands          | Call for info     |
|          | Assembly Kit # 38378 1,6 m Double Steel Swivel barrier for Bike path Black painted White or Yellow reflectives bands          | Call for info     |
|          | Assembly Kit # 38268 2,2 m Double Steel Swivel barrier for Bike path Black painted White or Yellow reflectives bands          | Call for info     |
| Options  | Assembly Kit # 38381 3,2 m Double Steel Swivel barrier for Bike path Black painted White or Yellow reflectives bands          | Call for info     |
|          | Option # 30690 Base cover, 6" x 12" painted black                                                                             | Call for info     |
| 3        | Option # 37160 Stainless Steel Padlock for barrier                                                                            | Call for info     |
| 1        | Option # 32371 48" deep Buried Base, Galvanised Steel c/w 4 Installation Bolts                                                | Call for info     |
| 1        | Option # 37596 Set of 4 Hilti .75 x 9.6" Stainless Steel Anchors with washers, nuts HVU Epoxy Capsule & Installation Template | Call for info     |

