



**INSTALLATION GUIDE FOR
MECHANICAL RETRACTABLE BOLLARDS**
Ø 4.7, Ø 7.9, Ø 9.8 inches
Ø 120, Ø 200, Ø 250 mm

GARANTEE:

The installation and civil engineering contractors who install URBACO products are entirely responsible for the installation and conform to the guidelines regarding the prescribed situation of each site, be it geological or architectural.

The product guarantee is valid only if the installation guidelines are respected and are in accordance with URBACO general terms and conditions.

In the event legal action is taken; an engineering and design department must perform a concrete study. This department will, if necessary, analyze the quality of the concrete by the specimens obtained by core sampling, and will verify that installation guidelines were followed.

If it is concluded that the installation is incorrect, the guarantee will be immediately revoked and the Project Manager will be informed of the incomplete installation. He will then be obligated to rectify the mistakes by resuming the installation and repairing the site according to the agreed specifications.

Analyses and study costs will be the responsibility of the ordering company.

IMPORTANT NOTE: The registration form that you receive must be completed and returned within 8 days of installation or within 30 days from shipping. This will validate the warrantee. Failure to comply will result in URBACO denying all claims.

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1 SITE WORKS

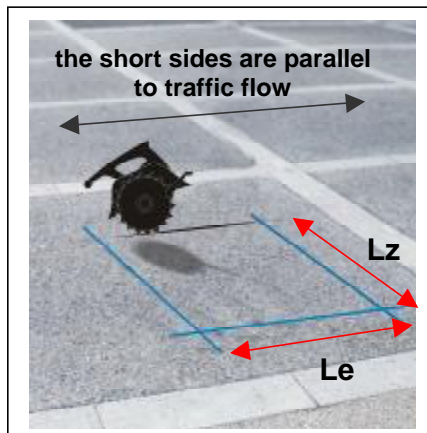
1.1 Marking the Site

The chosen area must be away from the tire path.

Mark the surface according to the measurement shown on the plan (measurements of the casing adding 6 to 8 inches).

CAUTION: If the marking is rectangular, draw it so the short sides are parallel to traffic flow.

1.2 Site Preparation



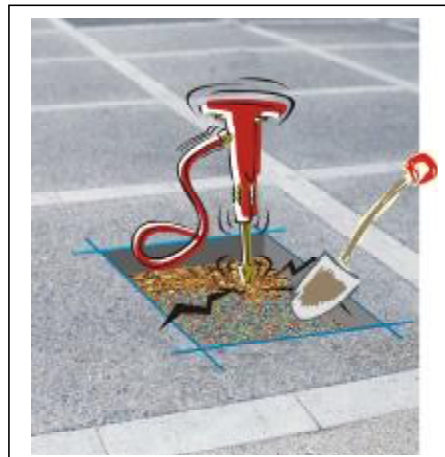
Depending on the nature of the site, saw-cut the asphalt, concrete etc., or remove the cobblestones.

Please refer to the table on pages 9, 10, and 11 for the **Lz** and **Le** measurements for the different bollard models

If a series of bollards is to be installed, we suggest digging a trench over digging individual holes.

1.3 Excavation

With a jackhammer or similar tool, excavate the area according to the dimensions in the table (**Le**, **Lz**, **He**). Clear the debris (32.5"x32.5"xH46" approximately 1 cubic yard per bollard).



1.4 Drain

Create a French drain that will accommodate the type of subsoil on the site. The drain should equal the measurements of the lost casing plus 8 to 12 inches. At the bottom of the hole, DOT approved geotextile may be used. Ballast should then be poured until it is 10 inches thick. The drain must be able to absorb approximately 5 US gallons in 5 minutes. If the subsoil is not permeable enough, connect the drain to the rainwater system, to a sump pump, or other, depending on availability and local codes.

1.5 Base



For all bollards except the Tradition line, that has bollards with 10-inch diameters, the rectangular lost casing will be positioned so that the side holes are parallel to the flow of traffic..

For Tradition bollards with a 10 in diameter, the square lost casing will be positioned so that the side holes are oriented perpendicularly to the flow of traffic.

This allows the installation of a 4" Ø PVC pipe drain so that the casing can be on top with the corresponding hole in front of the bottom of the primary casing. Cover the top of the hole with a screen so that no debris can enter.

SPECIFICATIONS OF THE CONCRETE

Binders: artificial cements with CPA 325 components.

Granulates: with 10-20mm/0.5" - 0.8" granularity. The granulates must be limestone or silica without salts or clay.

Concentration of concrete: Concrete must be completely firm and dry. The subsidence to the Abrams cone must be between 4 and 7 cm for a truncated cone mold of 30 cm high, 10 cm in diameter in the upper part, and 20 cm in diameter in the lower part where 4 layers of concrete should be poured. Amount: 350Kg/m³, 22lbs/cubic ft. or 3000 ft concrete or 4000 psi.

SPECIFICATIONS OF THE STEEL RE-BARS

Use HLE steel re-bars only. For each type of steel used, consider the following:

- the composition of the steel and its carbon content.
 - the geometric characteristics of the sections (parameters that define the shape of the section).
 - the adhesive qualities.
 - the mechanical properties.
 - the usage recommendations: the bending, cutting and welding conditions.
 - the commercial designation (ex. TOR steel).
 - the class of the material (ex. FE E 40A).
- The processing used must comply with the manufacturer's guidelines as well as local codes.

INSTALLATION OF THE RE-BARS

The installation must comply with the specifications for re-bar. These bars must be installed to allow a 2" thickness as compared to the internal part of the casing.

CONCRETE INSTALLATION

After installing the re-bars, concrete must be poured for the base. Ensure a horizontal and flat spread. Do not forget to protect the drain opening. It is important to respect the measurements quoted in the bedding plan document.

1.6 Lost Casing

The lost casing is a form used to dimension the hole in the concrete block. It will house the casing of the bollard.

- Position the lost casing so that the hole at the bottom is in front of the drainpipe on the concrete sole. The pipe must not extend into the lost casing more than 1/8".
- Block off the two holes on the sides of the casing with duct tape. Holes are used for automatic bollards only.

- Maintain the inside of the casing with wooden planks that withstand the pressure of the concrete and to preserve the square of the casing and the dimensions.

- **Verify the vertical and horizontal square of the casing, as well as the dimensions of the casing before and after pouring the concrete.** This will ensure that the bollard casing will fit with the necessary tolerances, and will also make the removal easy for maintenance. The primary casing is shorter than the lost casing and should be installed lower than the finished grade (check installation cut sheet).

Pour concrete around the lost casing ensuring a 6" thickness. Pour concrete in the trench from the bollards to the City 3 controller.

Top dimensions are critical. The elevation necessary depends on the kind of surface (asphalt, pavement stones, concrete). Check local codes. Let cure after checking levels.

Verify the following before installing the lost casing:

- 1) Control the width of the casing from bottom to top. It must be as indicated on the installation cut sheet. Ensure that there is no void under the casing.
- 2) Ensure that the drain is functional (able to absorb 5 US gallons in 5 minutes).
- 3) Ensure that the bottom of the casing is clean and free from concrete.
- 4) Control the depth of the casing. It must be according to what is shown on the installation cut sheet. A casing installed too deep keeps the primary casing from sitting properly on the bottom of the lost casing and makes it hang from the cover, which must be avoided. A lost casing that is installed too high makes the bollard stick out of the ground. This is dangerous to pedestrians, and raising the ground is difficult and costly.
- 5) Clean the surrounding of the hole from sand and gravel that could damage the bollards' paint.

1.7 Primary Casing

Caution before unpacking: **ATTENTION: BOLLARDS ARE VERY HEAVY!**
BEFORE CUTTING THE STRAPS, ENSURE THAT THE PRODUCTS ARE SITTING PROPERLY ON THE PALLET AND THAT THE PALLET IS IN GOOD CONDITION.

Put two tape-bands on the plastic wrap, around the casing at the top and at the bottom to maintain it better. Cut off the top of the plastic wrap with a blade.



Have someone tilt the bollard, and cut off the bottom of the plastic wrap to allow evacuation of the water through the drain.



!! PLASTIC WRAP MUST BE LEFT IN PLACE WHILE POSITIONING THE BOLLARD WITH POLYURETHANE FOAM.

On the cover, remove the plastic caps with a screwdriver and remove the four bolts. Remove the cover but be aware that it is very heavy. Remember the orientation, as the cover must be replaced exactly as it was removed.



1.8 Installation



The installation crew must be cautious with the following steps. Caution must also be taken when handling bollards, as they are extremely heavy. Personal protective equipment must be used. The site must be secured from traffic by signs placed in view.

The bollards must be installed with the appropriate equipment such as a crane or equivalent that can handle a minimum of a 1200-pound load.

Replace two cover bolts on opposite corners by pig tail hooks with a 12mm/0.5" diameter.



Place the primary casing in the lost casing:

- **When the casing is rectangular**, there are two 180° options:

To choose, you should base the installation on either the position of the key, or on the placement of the coat of arms.

- **When the casing is square**, there are two 180° options with respect to traffic flow signs on the casing, as well as the possible passage of wires. Choose based on the position of the key. The bronze flap must match the top of the lock bar that is inside the bollard's casing. If the bollard has a coat of arms, choose based on the placement of the coat of arms.

Make adequate hook-ups. Secure casing with polyurethane foam not included in the four corners between the lost casing and the primary casing. Cut off the excess foam when dry.

1.9 Completion

Before repositioning the cover, arrange the surrounding surface finish (asphalt, pavement stones, concrete) and carry out the controls detailed in 2.1 next section.

2 COMMISSIONING

2.1 Bollard controls

Follow the control operations detailed in the Maintenance manual.

- Locking
- Plastic Ring
- Gas jack
- Efficiency of the drain unless already verified in step 1.6

Place the cover back on the casing ensuring that the keyhole matches the top of the lock bar in the bollard's casing. After tightening the 4 bolts, secure the plastic caps with a rubber mallet.

2.2 Testing

- 1) To raise the bollard, turn the key counter-clockwise. The captive key is released.
- 2) To lower the bollard, turn the key clockwise. The captive key is now captive. Push on the top of the bollard until it clicks and is locked in the lower position.
For tall bollards, push down with your hands until the intermediary is locked. Then, turn another quarter of a turn and lower with the foot.
- 3) Repeat the operation three times.

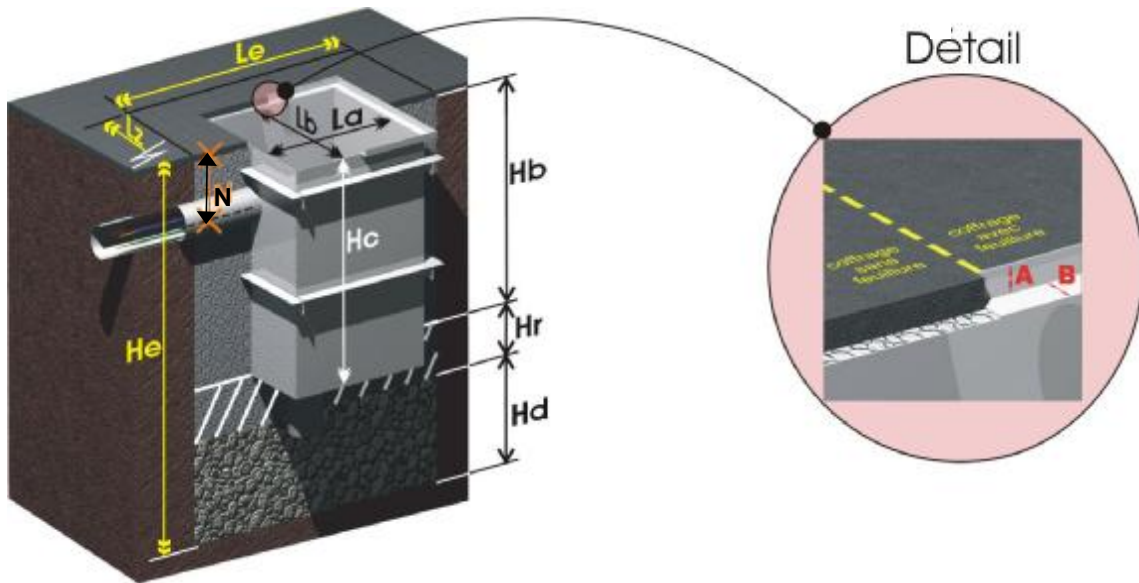
Installation is over. You can remove the safety protections.



While the bollard is down, the gas jack is compressed. It may prematurely weaken if the bollard is kept in low position for extended periods of time (over a week).
Note that to replace the jack is technically easy to do and takes little time.

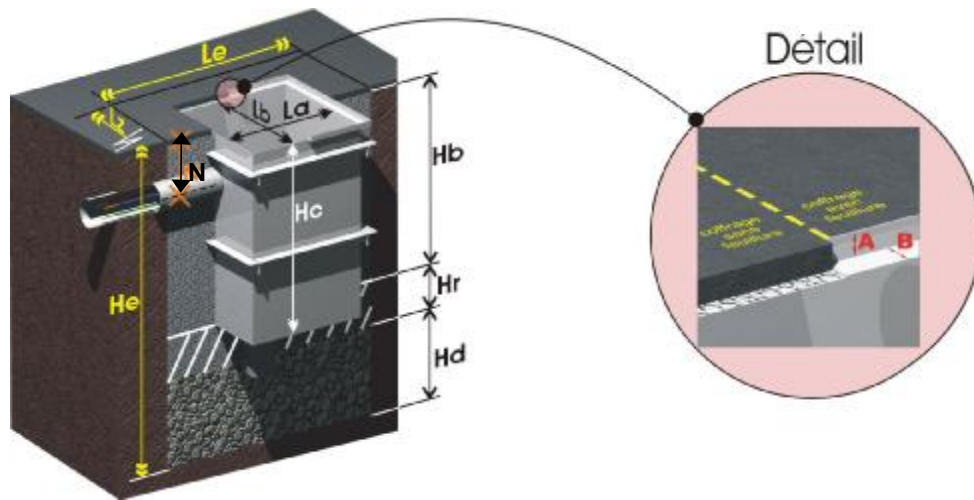
3 SITE WORKS DATA/MEASUREMENTS IN INCHES

NOTE : All measurements in the following tables are in inches.



Semi automatic “High Security” bollards

BOLLARD				LOST CASING				Excavation			Base	Drain	Pipe	Detail
Model	Ø	Height	Ref.	Ref.	La	Lb	Hc	Le	Lz	He	Hr	Hd	N	A-B
Cylinder	9.84	19.7	BMCLPF50H	BOCOFF820	16.7	16.7	32.3	32.5	32.5	52	7.87	11.8	13.2	0.8-1
Cylinder	9.84	27.6	BMCLPF70H	BOCOFF1300	16.7	16.7	51.2	32.5	32.5	70.9	7.87	11.8	15.4	1-1
Sénat	9.84	27.6	BMSNTF70H	BOCOFF1300	16.7	16.7	34.6	32.5	32.5	70.9	7.87	11.8	15.4	1-1



Semi automatic “Tradition” bollards

(in the column “Detail”, n/a means “not applicable”)

BOLLARD				LOST CASING			Excavation			Base	Drain	Pipe	Detail	
Model	Ø	Height	Ref.	Ref.	La	Lb	Hc	Le	Lz	He	Hr	Hd	N	A-B
Acropole	9.8	19.7	BMACEF50AR	BOCOFF665	16.7	16.7	26.2	32.5	32.5	45.9	7.9	11.8	6.5	n/a
Acropole	9.8	23.6	BMACEF60AR	BOCOFF855	16.7	16.7	33.7	32.5	32.5	53.3	7.9	11.8	6.5	n/a
Acropole	9.8	19.7	BMACEF50T	BOCOFF700	16.7	16.7	27.6	32.5	32.5	47.2	7.9	11.8	7.1	0.6-1
Acropole	9.8	23.6	BMACEF60	BOCOFF880	16.7	16.7	34.6	32.5	32.5	54.3	7.9	11.8	8.3	1-1
Cabestan	9.8	11.8	BMCBTF30	BOCOFF475	16.7	16.7	18.7	32.5	32.5	38.4	7.9	11.8	6.5	n/a
Cabestan	9.8	16.5	BMCBTF42	BOCOFF665	16.7	16.7	26.2	32.5	32.5	45.9	7.9	11.8	6.5	n/a
Cabestan	9.8	20.5	BMCBTF52	BOCOFF665	16.7	16.7	26.2	32.5	32.5	45.9	7.9	11.8	6.5	n/a
Catalane	9.8	19.7	BMCTLF50	BOCOFF665	16.7	16.7	26.2	32.5	32.5	45.9	7.9	11.8	6.5	n/a
Cylinder	9.8	19.7	BMCLPF50AR	BOCOFF665	16.7	16.7	26.2	32.5	32.5	45.9	7.9	11.8	6.5	n/a
Cylinder	9.8	23.6	BMCLPF60AR	BOCOFF855	16.7	16.7	33.7	32.5	32.5	53.3	7.9	11.8	6.5	n/a
Cylinder	9.8	19.7	BMCLPF50T	BOCOFF700	16.7	16.7	27.6	32.5	32.5	47.2	7.9	11.8	7.1	0.6-1
Cylinder	9.8	23.6	BMCLPF60	BOCOFF880	16.7	16.7	34.6	32.5	32.5	54.3	7.9	11.8	8.3	1-1
Cylinder	9.8	20.5	BMCLPF52	BOCOFF665	16.7	16.7	26.2	32.5	32.5	45.9	7.9	11.8	6.5	n/a
Cylinder	9.8	24.4	BMCLPF62	BOCOFF855	16.7	16.7	33.7	32.5	32.5	53.3	7.9	11.8	6.5	n/a
Grand Lyon	9.8	11.8	BMGRLF30	BOCOFF475	16.7	16.7	18.7	32.5	32.5	38.4	7.9	11.8	6.5	n/a
Grand Lyon	9.8	20.5	BMGRLF50	BOCOFF665	16.7	16.7	26.2	32.5	32.5	45.9	7.9	11.8	6.5	n/a
Narbonne	9.8	19.7	BMNRBF50	BOCOFF665	16.7	16.7	26.2	32.5	32.5	45.9	7.9	11.8	6.5	n/a
Ovalie	15.7x7.9	19.7	BMOVLH50B	BOCOFF700	16.7	16.7	27.6	32.5	32.5	47.2	7.9	11.8	7.1	0.6-1
Ovalie	15.7x7.9	19.7	BMOVLH50	BOCOFF700	16.7	16.7	27.6	32.5	32.5	47.2	7.9	11.8	7.1	0.6-1
Ovalie	4.7x3.1	19.7	BMOVLD50	BOCOFD670	10.0	6.1	26.4	24.6	21.9	46.1	7.9	11.8	6.9	0.6-1
Ovalie	4.7x3.1	29.5	BMOVLD75	BOCOFD960A	10.0	6.1	37.8	24.6	21.9	57.5	7.9	11.8	6.9	0.6-1
Vendôme	9.8	19.7	BMVDMF50IT	BOCOFF700	16.7	16.7	27.6	32.5	32.5	47.2	7.9	11.8	7.1	0.6-1
Vendôme	9.8	23.6	BMVDMF60I	BOCOFF880	16.7	16.7	34.6	32.5	32.5	54.3	7.9	11.8	8.3	1-1
Villeneuve	9.8	11.8	BMVNVF30	BOCOFF475	16.7	16.7	18.7	32.5	32.5	38.4	7.9	11.8	6.5	n/a
Villeneuve	9.8	19.7	BMVNVF50	BOCOFF665	16.7	16.7	26.2	32.5	32.5	45.9	7.9	11.8	6.5	n/a
Villeneuve	9.8	25.6	BMVNVF65	BOCOFF855	16.7	16.7	33.7	32.5	32.5	53.3	7.9	11.8	6.5	n/a

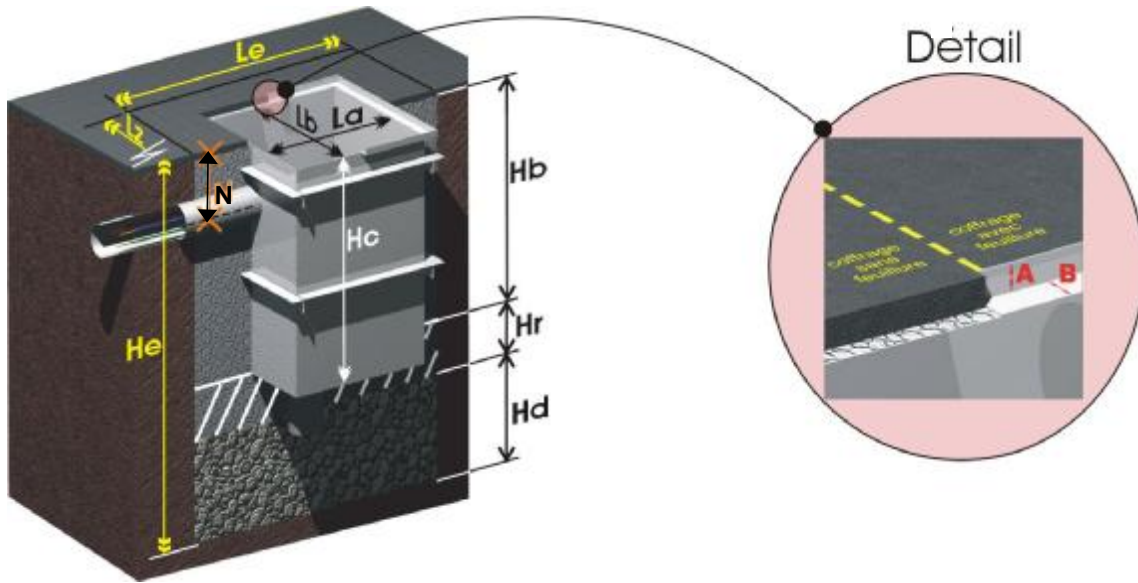
Semi automatic “Monobloc” bollards

BOLLARD			LOST CASING					Excavation			Base	Drain	Pipe
Model	Ø	Height	Ref.	Ref.	La	Lb	Hc	Le	Lz	He	Hr	Hd	N
Acropole	9.8	19.7	BMACEF50	BOCOFF671	14.1	16.7	26.5	29.8	32.4	46.2	7.9	11.8	6.8
Acropole	9.8	29.5	BMACEF75	BOCOFF954	14.1	16.7	37.6	29.8	32.4	57.3	7.9	11.8	6.8
Acropole	7.9	19.7	BMACEE50	BOCOFE664	11.3	14.1	26.2	27.1	29.8	45.9	7.9	11.8	6.1
Acropole	7.9	29.5	BMACEE75	BOCOFE959	11.3	14.1	37.8	27.1	29.8	57.5	7.9	11.8	6.1
Acropole	4.7	19.7	BMACED50	BOCOFD667	8.2	10.8	26.3	23.9	26.6	46.0	7.9	11.8	7.1
Acropole	4.7	29.5	BMACED75	BOCOFD960	8.2	10.8	37.9	23.9	26.6	57.6	7.9	11.8	7.1
Athéna	9.8	19.7	BMATPF50	BOCOFF671	14.1	16.7	26.5	29.8	32.4	46.2	7.9	11.8	6.8
Athéna	9.8	29.5	BMATPF75	BOCOFF954	14.1	16.7	37.6	29.8	32.4	57.3	7.9	11.8	6.8
Athéna	7.9	19.7	BMATPE50	BOCOFE664	11.3	14.1	26.2	27.1	29.8	45.9	7.9	11.8	6.1
Athéna	7.9	29.5	BMATPE75	BOCOFE959	11.3	14.1	37.8	27.1	29.8	57.5	7.9	11.8	6.1
Athéna	4.7	19.7	BMATPD50	BOCOFD667	8.2	10.8	26.3	23.9	26.6	46.0	7.9	11.8	7.1
Athéna	4.7	29.5	BMATPD75	BOCOFD960	8.2	10.8	37.9	23.9	26.6	57.6	7.9	11.8	7.1
Chateaneuf	9.8	19.7	BMCHPF50	BOCOFF671	14.1	16.7	26.5	29.8	32.4	46.2	7.9	11.8	6.8
Chateaneuf	9.8	29.5	BMCHPF75	BOCOFF954	14.1	16.7	37.6	29.8	32.4	57.3	7.9	11.8	6.8
Chateaneuf	7.9	19.7	BMCHPE50	BOCOFE664	11.3	14.1	26.2	27.1	29.8	45.9	7.9	11.8	6.1
Chateaneuf	7.9	29.5	BMCHPE75	BOCOFE959	11.3	14.1	37.8	27.1	29.8	57.5	7.9	11.8	6.1
Chateaneuf	4.7	19.7	BMCHPD50	BOCOFD667	8.2	10.8	26.3	23.9	26.6	46.0	7.9	11.8	7.1
Chateaneuf	4.7	29.5	BMCHPD75	BOCOFD960	8.2	10.8	37.9	23.9	26.6	57.6	7.9	11.8	7.1
Chateaneuf	4.7	21.7	BMCHTD50	BOCOFD630	8.2	10.8	24.9	23.9	26.6	44.6	7.9	11.8	7.1
Chateaneuf	4.7	31.5	BMCHTD75	BOCOFD920	8.2	10.8	36.3	23.9	26.6	56.0	7.9	11.8	7.1
Cylinder	9.8	19.7	BMCLPF50	BOCOFF671	14.1	16.7	26.5	29.8	32.4	46.2	7.9	11.8	6.8
Cylinder	9.8	29.5	BMCLPF75	BOCOFF954	14.1	16.7	37.6	29.8	32.4	57.3	7.9	11.8	6.8
Cylinder	7.9	19.7	BMCLPE50	BOCOFE664	11.3	14.1	26.2	27.1	29.8	45.9	7.9	11.8	6.1
Cylinder	7.9	29.5	BMCLPE75	BOCOFE959	11.3	14.1	37.8	27.1	29.8	57.5	7.9	11.8	6.1
Cylinder	4.7	19.7	BMCLPD50	BOCOFD667	8.2	10.8	26.3	23.9	26.6	46.0	7.9	11.8	7.1
Cylinder	4.7	29.5	BMCLPD75	BOCOFD960	8.2	10.8	37.9	23.9	26.6	57.6	7.9	11.8	7.1
Vendôme	9.8	19.7	BMVDMF50I	BOCOFF671	14.1	16.7	26.5	29.8	32.4	46.2	7.9	11.8	6.8
Vendôme	9.8	29.5	BMVDMF75I	BOCOFF954	14.1	16.7	37.6	29.8	32.4	57.3	7.9	11.8	6.8
Vendôme	7.9	19.7	BMVDME50I	BOCOFE664	11.3	14.1	26.2	27.1	29.8	45.9	7.9	11.8	6.1
Vendôme	7.9	29.5	BMVDME75I	BOCOFE959	11.3	14.1	37.8	27.1	29.8	57.5	7.9	11.8	6.1
Vendôme	4.7	19.7	BMVDMD50I	BOCOFD667	8.2	10.8	26.3	23.9	26.6	46.0	7.9	11.8	7.1
Vendôme	4.7	29.5	BMVDMD75I	BOCOFD960	8.2	10.8	37.9	23.9	26.6	57.6	7.9	11.8	7.1

NOTE : All measurements in these two tables are in inches.

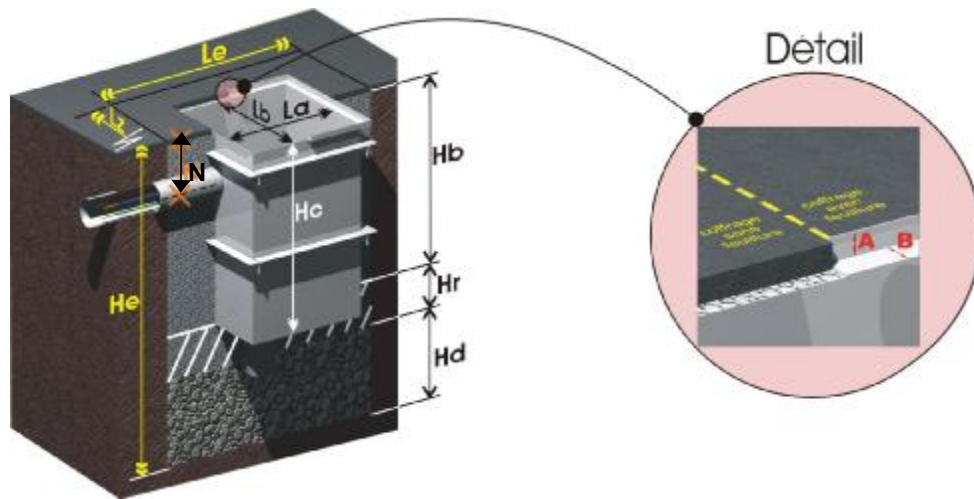
4 SITE WORKS DATA/MEASUREMENTS IN MILLIMETERS

NOTE : All measurements in the following tables are in millimeters.



Semi automatic “High Security” bollards

BOLLARD				LOST CASING				Excavation			Base	Drain	Pipe	Detail
Model	Ø	Height	Ref.	Ref.	La	Lb	Hc	Le	Lz	He	Hr	Hd	N	A-B
Cylinder	250	500	BMCLDF50H	BOCOFF0820	425	425	820	825	825	1320	200	300	335	20-25
Cylinder	250	700	BMCLDF70H	BOCOFF1300	425	425	1300	825	825	1800	200	300	390	25-25
Sénat	250	700	BMSNTF70H	BOCOFF1300	425	425	1300	825	825	1800	200	300	210	25-25



Semi automatic “Tradition” bollards

(in the column “Detail”, n/a means “not applicable”)

BOLLARD				LOST CASING			Excavation			Base	Drain	Pipe	Detail	
Model	Ø	Height	Ref.	Ref.	La	Lb	Hc	Le	Lz	He	Hr	Hd	N	A-B
Acropole	250	500	BMACEF50AR	BOCOFF665	425	425	665	825	825	1165	200	300	165	n/a
Acropole	250	600	BMACEF60AR	BOCOFF855	425	425	855	825	825	1355	200	300	165	n/a
Acropole	250	500	BMACEF50T	BOCOFF700	425	425	700	825	825	1200	200	300	180	15-25
Acropole	250	600	BMACEF60	BOCOFF880	425	425	880	825	825	1380	200	300	210	25-25
Cabestan	250	300	BMCBTF30	BOCOFF475	425	425	475	825	825	975	200	300	165	n/a
Cabestan	250	420	BMCBTF42	BOCOFF665	425	425	665	825	825	1165	200	300	165	n/a
Cabestan	250	520	BMCBTF52	BOCOFF665	425	425	665	825	825	1165	200	300	165	n/a
Catalane	250	500	BMCTLF50	BOCOFF665	425	425	665	825	825	1165	200	300	165	n/a
Cylinder	250	500	BMCLPF50AR	BOCOFF665	425	425	665	825	825	1165	200	300	165	n/a
Cylinder	250	600	BMCLPF60AR	BOCOFF855	425	425	855	825	825	1355	200	300	165	n/a
Cylinder	250	500	BMCLPF50T	BOCOFF700	425	425	700	825	825	1200	200	300	180	15-25
Cylinder	250	600	BMCLPF60	BOCOFF880	425	425	880	825	825	1380	200	300	210	25-25
Cylinder	250	520	BMCLPF52	BOCOFF665	425	425	665	825	825	1165	200	300	165	n/a
Cylinder	250	620	BMCLPF62	BOCOFF855	425	425	855	825	825	1355	200	300	165	n/a
Grand Lyon	250	300	BMGRLF30	BOCOFF475	425	425	475	825	825	975	200	300	165	n/a
Grand Lyon	250	520	BMGRLF50	BOCOFF665	425	425	665	825	825	1165	200	300	165	n/a
Narbonne	250	500	BMNRBF50	BOCOFF665	425	425	665	825	825	1165	200	300	165	n/a
Ovalie	400x200	500	BMOVLH50B	BOCOFF700	425	425	700	825	825	1200	200	300	180	15-25
Ovalie	400x200	500	BMOVLH50	BOCOFF700	425	425	700	825	825	1200	200	300	180	15-25
Ovalie	120x80	500	BMOVLD50	BOCOFD670	255	155	670	625	555	1170	200	300	175	15-25
Ovalie	120x80	750	BMOVLD75	BOCOFD960A	255	155	960	625	555	1460	200	300	175	15-25
Vendôme	250	500	BMVDMF50IT	BOCOFF700	425	425	700	825	825	1200	200	300	180	15-25
Vendôme	250	600	BMVDMF60I	BOCOFF880	425	425	880	825	825	1380	200	300	210	25-25
Villeneuve	250	300	BMVNVF30	BOCOFF475	425	425	475	825	825	975	200	300	165	n/a
Villeneuve	250	500	BMVNVF50	BOCOFF665	425	425	665	825	825	1165	200	300	165	n/a
Villeneuve	250	650	BMVNVF65	BOCOFF855	425	425	855	825	825	1355	200	300	165	n/a

Semi automatic “Monobloc” bollards

BOLLARD				LOST CASING			Excavation			Base	Drain	Pipe	
Model	Ø	Height	Ref.	Ref.	La	Lb	Hc	Le	Lz	He	Hr	Hd	N
Acropole	250	500	BMACEF50	BOCOFF671	357	423	673	757	823	1173	200	300	172
Acropole	250	750	BMACEF75	BOCOFF954	357	423	956	757	823	1456	200	300	172
Acropole	200	500	BMACEE50	BOCOFE664	288	358	666	688	758	1166	200	300	154
Acropole	200	750	BMACEE75	BOCOFE959	288	358	961	688	758	1461	200	300	154
Acropole	120	500	BMACED50	BOCOFD667	208	275	669	608	675	1169	200	300	180
Acropole	120	750	BMACED75	BOCOFD960	208	275	962	608	675	1462	200	300	180
Athéna	250	500	BMATPF50	BOCOFF671	357	423	673	757	823	1173	200	300	172
Athéna	250	750	BMATPF75	BOCOFF954	357	423	956	757	823	1456	200	300	172
Athéna	200	500	BMATPE50	BOCOFE664	288	358	666	688	758	1166	200	300	154
Athéna	200	750	BMATPE75	BOCOFE959	288	358	961	688	758	1461	200	300	154
Athéna	120	500	BMATPD50	BOCOFD667	208	275	669	608	675	1169	200	300	180
Athéna	120	750	BMATPD75	BOCOFD960	208	275	962	608	675	1462	200	300	180
Chateauneuf	250	500	BMCHPF50	BOCOFF671	357	423	673	757	823	1173	200	300	172
Chateauneuf	250	750	BMCHPF75	BOCOFF954	357	423	956	757	823	1456	200	300	172
Chateauneuf	200	500	BMCHPE50	BOCOFE664	288	358	666	688	758	1166	200	300	154
Chateauneuf	200	750	BMCHPE75	BOCOFE959	288	358	961	688	758	1461	200	300	154
Chateauneuf	120	500	BMCHPD50	BOCOFD667	208	275	669	608	675	1169	200	300	180
Chateauneuf	120	750	BMCHPD75	BOCOFD960	208	275	962	608	675	1462	200	300	180
Chateauneuf	120	550	BMCHTD50	BOCOFD630	208	275	632	608	675	1132	200	300	180
Chateauneuf	120	800	BMCHTD75	BOCOFD920	208	275	922	608	675	1422	200	300	180
Cylinder	250	500	BMCLPF50	BOCOFF671	357	423	673	757	823	1173	200	300	172
Cylinder	250	750	BMCLPF75	BOCOFF954	357	423	956	757	823	1456	200	300	172
Cylinder	200	500	BMCLPE50	BOCOFE664	288	358	666	688	758	1166	200	300	154
Cylinder	200	750	BMCLPE75	BOCOFE959	288	358	961	688	758	1461	200	300	154
Cylinder	120	500	BMCLPD50	BOCOFD667	208	275	669	608	675	1169	200	300	180
Cylinder	120	750	BMCLPD75	BOCOFD960	208	275	962	608	675	1462	200	300	180
Vendôme	250	500	BMVDMF50I	BOCOFF671	357	423	673	757	823	1173	200	300	172
Vendôme	250	750	BMVDMF75I	BOCOFF954	357	423	956	757	823	1456	200	300	172
Vendôme	200	500	BMVDME50I	BOCOFE664	288	358	666	688	758	1166	200	300	154
Vendôme	200	750	BMVDME75I	BOCOFE959	288	358	961	688	758	1461	200	300	154
Vendôme	120	500	BMVDMD50I	BOCOFD667	208	275	669	608	675	1169	200	300	180
Vendôme	120	750	BMVDMD75I	BOCOFD960	208	275	962	608	675	1462	200	300	180

NOTE : All measurements in these two tables are in millimeters.



TRAINING SESSIONS

Urbaco is pleased to offer technical training sessions. These first level sessions last two days and the second level sessions last three days. These sessions can be conducted in French, English and Spanish.

MAINTENANCE CONTRACT

Urbaco offers a maintenance contract that will meet your needs:

Maintenance contract: Preventive maintenance.

Preferred Care Contract: Worldwide maintenance; includes travel expenses, labor, simplified maintenance budget, and urgent intervention plan.

AFTERSALES SERVICE



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