ONTARIO BOLLARDS

Technical Service Manual

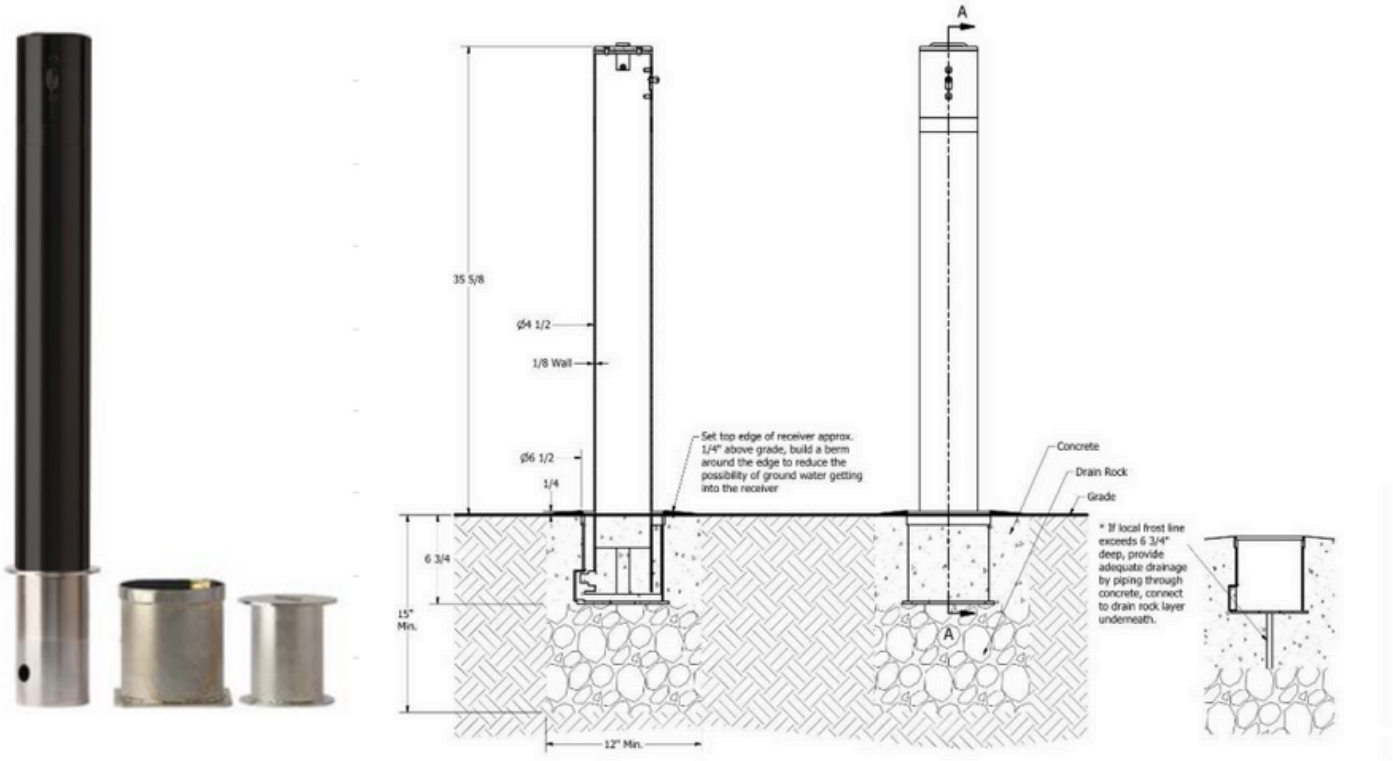
OB4536RMPC

***Important Notes*:**

***INSTALLATION METHODS VARY FOR DIFFERENT SUBSTRATES (Ashpalt, Concrete, Landscape)**

Drainage is critical, ensure proper drainage (min. 12") and water flow away from receiver to unsure proper function. If the local frost line is deeper than 24" inches, ensure that the drainage piping extends below the frost line to prevent damage to the installation during freezing conditions.

This guide provides an overview of the steps based on the image, ensuring both secure installation and proper drainage for the bollard receiver.



The 4536RM Stainless Steel Removable Bollard features internal locking hardware for quick and easy access to restricted areas. Elevated key-access avoids collection of dirt and debris in dusty, particle-filled environments. Its clean and versatile design is highly visible and available with alternative mountings (see retractable and fixed models) for consistent aesthetics that suit any modern building or landscape. High-quality 316 grade stainless steel with #6 satin finish features high resistance to corrosion and weathering. Posts ship standard with 1 of 4 colored reflector stripes and include mounting covers to prevent tripping hazards and collection of debris.

Heigth	35.5"	Body Diameter	4.5"	Function	Removable
Weight	20 Lbs	Base Diameter	6.3"	Material	316 Stainless Steel

Item	Part Number	Descripton	Material	Weight
1	4536RMSS	Removable Bollard	Stainless Steel 316	26.0 Lbs
2	4536RMPC	Removable Bollard	Stainless Steel 316	26.0 Lbs
			With Powder Coated Surface	
3		Reflective - White/Yellow	Plastic	

Bollard Installation Instructions

For Concrete Installation only

- **Prepare the Hole:**
  - Cut/Core a hole at the designated bollard location.
  - Ensure there is at least a space of **3”** around the receiver ring for concrete placement and finish.
  - The total hole size should be minimum **12” wide and 24" deep**. (or under frost line where you deem applicable)
  - Access ground permeability to drain rainwater. **Pour 5L** down to the hole and start a timer. Water should seep into the ground in **30 minutes. If water does not drain, alternate solutions must be made prior to completing installation.**
- **Add Drainage Rock:**
  - Place **¾” drainage rock** at the bottom of the hole. (min.12")
  - Tamp the rock to ensure a solid base.
  - Height from grade to gravel should be roughly **6.25"**. Adjust the height so that the top of the receiver sits **1/8” to 1/4”** above the exterior surface. This creates a natural berm to prevent water accumulation.
- **Install the Receiver and Bollard:**
  - Once the correct amount of drainage rock is in place, set the receiver in the center of the hole.
  - Install the bollard until it locks into the receiver.
- **Level the Bollard:**
  - Important: Level the bollard using the bollard pipe, **NOT** the top of the receiver ring.
  - Ensure the bollard is centered in the hole and **completely level.**
- **Pour the Concrete:**
  - Begin placing concrete around the installation area.
  - **Vibrate the concrete periodically** to eliminate air pockets and ensure a solid pour.
- **Final Adjustments:**
  - Once all concrete is placed, make any necessary leveling adjustments while the concrete is still workable.
- **Finish the Concrete:**
  - Smooth and finish the concrete surface.
  - **Allow it to cure properly.**

✅ Your RMSS bollard is now successfully installed!

Bollard Installation Instructions

For Asphalt/Landscape Installation only

**Due to the natural unstableness of Asphalt/Landscape substates, installation will require further digging depth and additional support to ensure concrete can be placed, creating a proper footing. This method requires a 6" x 24" tube (not included) to be placed below the receiver, acting as an extension. Custom extensions can be requested.*

- **Prepare the Hole:**
  - Cut/Core a hole at the designated bollard location.
  - Ensure there is at least a space of **3”** around the receiver ring for concrete placement and finish.
  - The total hole size should be minimum **12” wide and 36" deep**. (or under frost line where you deem applicable)
  - Access ground permeability to drain rainwater. **Pour 5L** down to the hole and start a timer. Water should seep into the ground in **30 minutes. If water does not drain, alternate solutions must be made prior to completing installation.**
- **Add Drainage Rock:**
  - Place **¾” drainage rock** at the bottom of the hole. (min.6")
  - Tamp the rock to ensure a solid base.
  - Place a 24" x 6" *(not included)* tube onto the compacted gravel for your receiver to rest on. 6" of Gravel can be placed around the tube to prevent it from shifting.
  - Height from grade to tube should be roughly **6.25"**. Adjust the height so that the top of the receiver sits **1/8” to 1/4”** above the exterior surface. This creates a natural berm to prevent water accumulation.
- **Install the Receiver and Bollard:**
  - Once the correct amount of drainage rock is in place, set the receiver onto the extension tube.
  - Install the bollard until it locks into the receiver.
- **Level the Bollard:**
  - Important: Level the bollard using the bollard pipe, **NOT** the top of the receiver ring.
  - Ensure the bollard is centered in the hole and **completely level.**
- **Pour the Concrete:**
  - Begin placing concrete around the installation area.
  - Ensure receiver does not shift out of place from extension tube.
  - **Vibrate the concrete periodically** to eliminate air pockets and ensure a solid pour.
- **Final Adjustments:**
  - Once all concrete is placed, make any necessary leveling adjustments while the concrete is still workable.
- **Finish the Concrete:**
  - Smooth and finish the concrete surface.
  - **Allow it to cure properly.**

✅ Your RMSS bollard is now successfully installed!

Bollard Maintenance

- Synthetic Grease
- Lock Lubricant (Tri-flow or equivalent)
- Vacuum
- Stainless cleaner

Bollard Maintenance Instructions

To keep your bollards in good working order and prevent surface deterioration, maintenance is recommended 1-2 times per year. Bollards in wet or dirty environments may require more frequent lubrication and maintenance.

1. **Clear the Area**
   - Remove any debris and standing water from the surface surrounding the bollard.

2. **Clean the Bollard**
   - Use a rag to wipe down the retractable bollard, removing any accumulated debris from the bollard body and flange collar.

3. **Clean the Receiver**
   - Vacuum out the base of the receiver.
   - Ensure drainage holes are clear of dirt or debris.

4. **Lubricate the Plunger**
   - Turn the bollard upside down to reveal the plunger mechanism at the bottom .
   - Apply **synthetic grease** to the plunger and plunger mechanism.

5. **Maintain the Lock**
   - Wipe the lock clean.
   - Apply a small amount of **Tri-Flow lubricant** to the lock.

6. **Polish the Bollard**
   - Wipe down the bollard using a stainless steel cleaner to restore its appearance.

✅ Regular maintenance ensures smooth operation and extends the life of your bollards!

Troubleshooting

Problems with Inserting the Key

- Check for Debris – Inspect the lock for any debris blocking the key passage and remove it.
- Ensure the Lock is Not Frozen – If frozen, apply lock de-icer or briefly use a small butane torch to dethaw it.
    - To prevent freezing, apply a small amount of **Tri-Flow lubricant** periodically.

Problems with Turning the Lock

- If the key inserts but only turns slightly, the plunger may be stuck due to ice or debris.
- Check the plunger and mechanism for ice or debris:
    - If frozen, bring it into a warm area or use a butane torch to melt the ice.
    - If the plunger is free from ice and debris but the lock still won't turn, the lock may need to be replaced.

Important Note *

If the bollard sits in water, freezing temperatures can cause the plunger and mechanism to have superficial ice buildup preventing it from being removed. This ice can sometime be broken by lifting the bollard upwards forcefully in one hard swift motion.

To prevent this:

- Ensure no water accumulates at the bottom of the receiver.
- Keep the plunger mechanism properly greased.

✅ Following these steps will help keep your bollard functioning smoothly in all conditions.

More Information

If you require a replacement bollard key and or any replacement part, please contact one of our sales representatives at **Info@ontariobollards.com**

Thank you for your purchase with Ontario Bollards!

If you have any questions or require any assistance, do not hesitate to contact us.

289 891 8559

info@ontariobollards.com

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ONTARIO BOLLARDS

Manuel De Service Technique

OB4536RMPC

Guide D'installation Etape Par Etape Pour Une Borne Amovible

Inspection du site et préparation :

- Assurez-vous que le sol est stable et adapté à l'installation.
- Effectuez les vérifications nécessaires pour éviter d'endommager des infrastructures souterraines.
- Vérifiez les conditions de drainage afin de prévenir toute infiltration d'eau dans le récepteur de la borne.

Excavation :

- Creusez un trou d'une profondeur minimale de 15 pouces et d'un diamètre suffisant pour accueillir le récepteur (environ 12 pouces). Ajustez la profondeur en fonction de la ligne de gel locale si nécessaire.
- Assurez-vous qu'au moins 6 ¾ pouces du récepteur de la borne sont situés sous le niveau du sol.

Fondation et drainage :

- Ajoutez une couche de gravier drainant au fond du trou pour favoriser l'évacuation de l'eau. Compactez bien le gravier afin d'éviter tout affaissement ultérieur.
- Si nécessaire, installez un tuyau de drainage pour évacuer l'eau hors de la fondation de la borne (particulièrement dans les régions où la ligne de gel est plus profonde).

Mise en place du récepteur :

- Insérez le récepteur de la borne dans le trou préparé en veillant à ce qu'il soit parfaitement vertical et de niveau avec la surface environnante.
- Important : Placez le bord supérieur du récepteur environ ¼ de pouce au-dessus du sol et formez une légère butte autour de son pourtour afin de réduire les risques d'infiltration d'eau.

Coulage du béton :

- Versez du béton autour du récepteur afin de le stabiliser.
- Assurez-vous que le béton est bien au même niveau que la surface environnante.
- Laissez le béton sécher complètement afin qu'il fixe solidement le récepteur en place.

Installation de la borne :

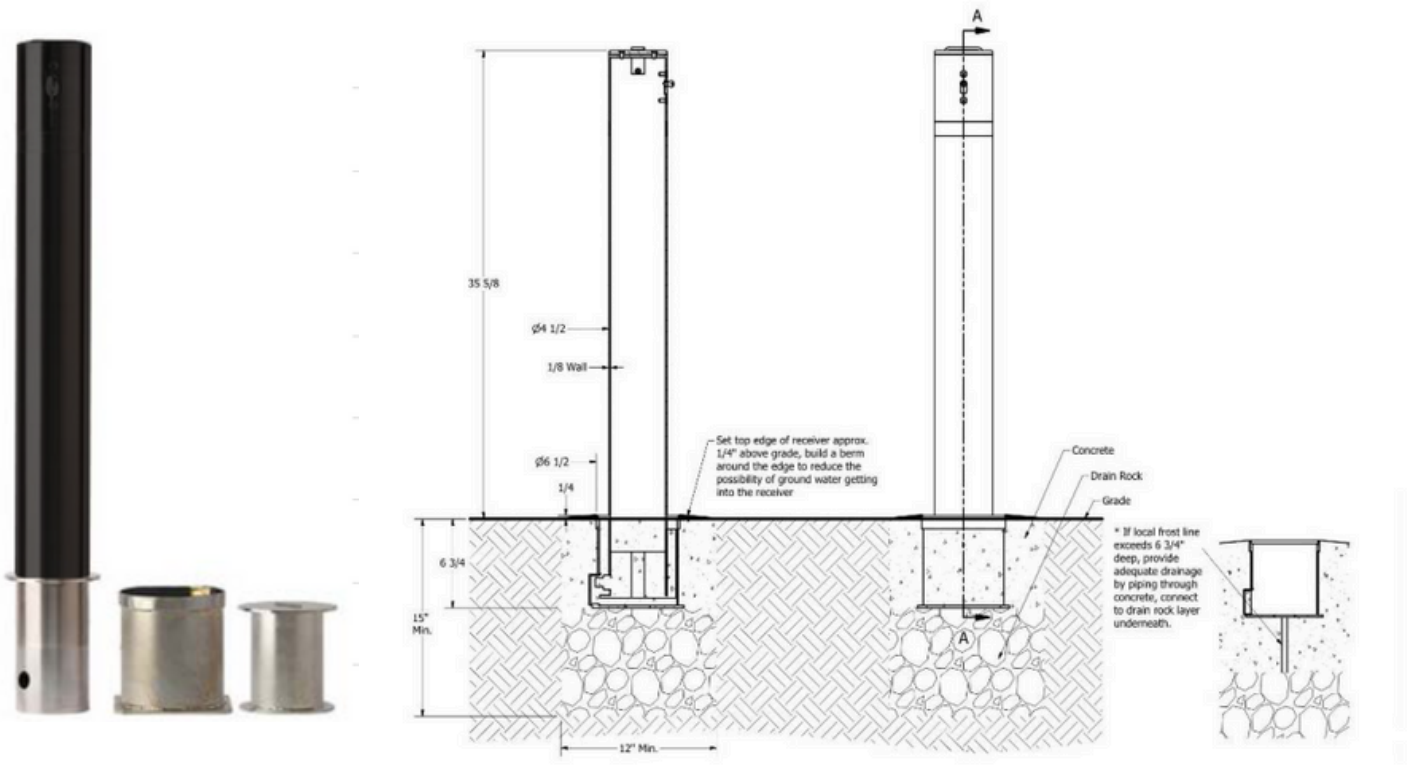
- Une fois la fondation totalement durcie, insérez la borne amovible dans le récepteur.
- Assurez-vous que la borne s'adapte parfaitement au manchon du récepteur.
- Fixez la borne en utilisant le mécanisme de verrouillage prévu, qui peut nécessiter une clé ou un autre dispositif de sécurité.

Inspection finale :

- Vérifiez que la borne est bien verticale et solidement fixée dans le récepteur.
- Assurez-vous que le gravier drainant et tout système de drainage installé fonctionnent correctement afin d'éviter l'accumulation d'eau dans le récepteur de la borne.

Notes :

- Le drainage est essentiel : Assurez-vous que l'eau s'évacue correctement loin de la fondation de la borne afin d'éviter toute accumulation d'eau.
- Adaptation à la ligne de gel locale : Si la ligne de gel dans votre région est plus profonde que 6 ¾ pouces, veillez à ce que le système de drainage (tuyau de drainage, gravier drainant) s'étende sous cette ligne pour éviter tout dommage dû au gel.
- Aperçu du processus : Ce guide présente une vue d'ensemble des étapes illustrées, garantissant une installation sécurisée et un drainage optimal du récepteur de la borne.



La borne amovible en acier inoxydable 4536RM est équipée d'un mécanisme de verrouillage interne permettant un accès rapide et facile aux zones restreintes. L'accès à la clé, situé en hauteur, empêche l'accumulation de saleté et de débris dans les environnements poussiéreux ou remplis de particules.
Son design épuré et polyvalent est très visible et disponible avec différentes options de fixation (voir les modèles rétractables et fixes) pour une esthétique uniforme adaptée à tout bâtiment ou aménagement paysager moderne.
Fabriquée en acier inoxydable de haute qualité 316 avec une finition satinée #6, elle offre une excellente résistance à la corrosion et aux intempéries.
Les bornes sont livrées avec 1 des 4 bandes réfléchissantes de couleur et incluent des couvercles de fixation pour éviter les risques de trébuchement et l'accumulation de débris.

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