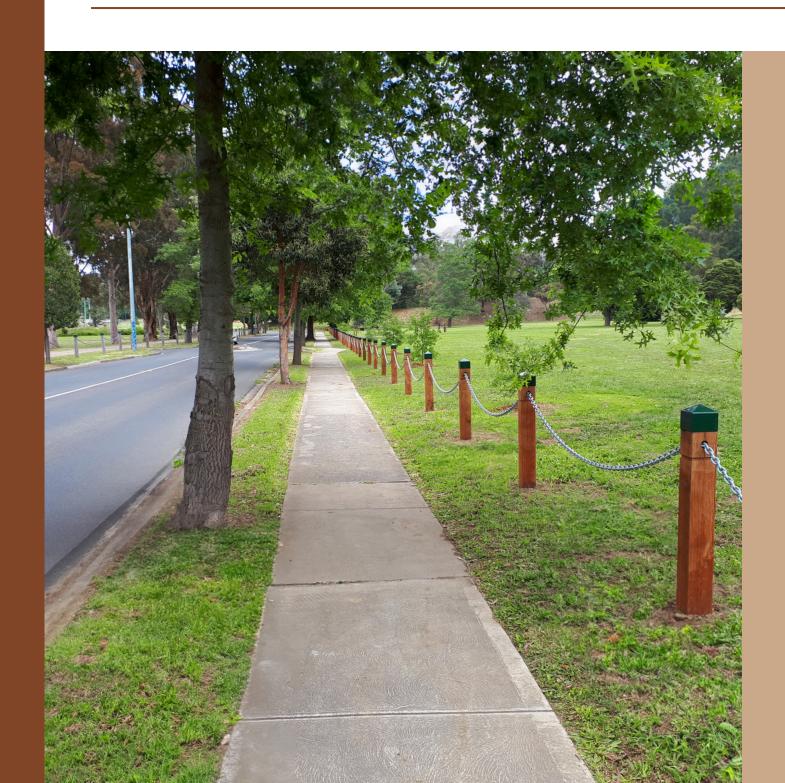


Bollard

INSTALLATION GUIDE



Installing **High-quality Bollards**

Barlings provide a wide range of timber bollards which are formed to suit specific purposes and to meet various councils, developers, companies or individual specifications and designs.

Bollards can be used for decorating and wayfinding. They define space, control vehicles and people, and protect from unwelcome traffic. They are a permeable barrier used to control and guide pedestrians and vehicles to deliver a range of functions:

Traffic Flow

- Visually define road and path boundaries

Pedestrian Control

 Chains between bollards can create a form of balustrade

Vehicle Control

Can be closely spaced to restrict vehicle movement

Impact Protection

 Acts as security barriers to protect infrastructure from accidental and deliberate impact

Guidance

Can include signage and wayfinding functions

Decoration

- Provide sculptural and memorial points of interest.



Ensuring the use of appropriate timber to withstand the weather and low maintenance is vital to their longevity. So too is the correct installation. Installation can be either using earth and cement slurry or in concrete footing. We have outlined the installation process for both options on the following pages.



Installation in **Earth & Cement Slurry**

1. Prepare Earth and Cement Slurry:

- Form the hole in the ground where you plan to install the bollard.
- For each hole, add 2 shovels of cement (1 x 20kg bag for 4 holes) and 8 to 12 litres of water. Adjust the water amount based on the soil type and hole size.

2. Mix the Slurry:

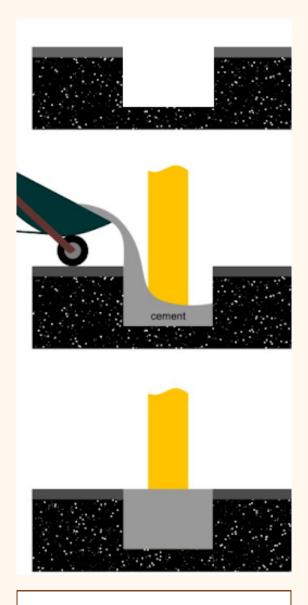
- Pour the water into the hole first.
- Using a shovel, rake in and mix the earth and cement until you achieve a consistency resembling thick cream.
- Only fill two-thirds of the hole with the slurry mixture.

3. Position and Level the Bollard:

- Insert the bollard into the slurry, ensuring it is aligned with the string line and leveled.
- Adjust the position as needed to meet the desired height and alignment specifications.

4. Backfill and Secure:

- Backfill the top 50 to 75mm around the surface of the bollard with additional soil.
- Allow the bollard to set in the slurry for 24 hours, providing ample time for the mixture to solidify and secure the bollard in place.



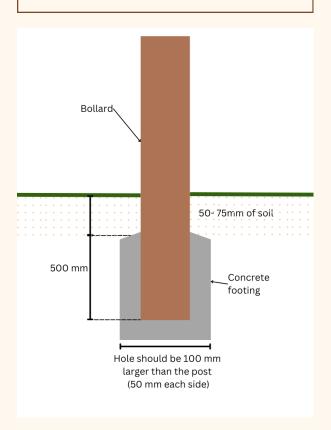
5. Check and Adjust:

- After the curing period, double-check the bollard's alignment and stability.
- Make any necessary adjustments to ensure the bollard is firmly set and meets the desired specifications.

Installation in Concrete Footing

1. Prepare Concrete Mix

- Use pre-mix concrete delivered in a mini mix or make your own ready-mixed or rapid-set concrete in a wheelbarrow.
- For better control, start with a small, drier mix in the barrow to set the post's height and alignment before adding the remainder of the concrete, even if you're using delivered pre-mix.



Note: For post and rail fences, I recommend using a ready-mix like a rapid set. This way you can install the post and rails as you go. Pre-mix delivery would not suit unless you set all the posts and rails and braced all the posts in position.

2. Set Initial Height and Line:

- Make a small batch of the concrete mix to set the post's initial height and ensure alignment with a string line.
- Adjust the post until it reaches the correct height and is level.
- Lean the posts back against the edge of the hole temporarily until ready to proceed with the full concrete pour.

3. Take Your Time for Accuracy:

- Setting the posts to the string line and leveling them requires time and precision.
- Avoid waiting until the cement truck arrives, as this may lead to rushed installation due to time constraints imposed by the driver.
- By taking the necessary time in the initial stages, you ensure the posts are correctly positioned and leveled before completing the installation.

4. Avoid Rush During Cement Truck Arrival:

- Waiting until the last minute may result in rushed work when the cement truck arrives.
- A rushed installation can compromise the accuracy and stability of the bollards.
- Prioritize setting the posts accurately before the concrete pour to avoid time pressure during the arrival of the cement truck.

Installation in

Galvanized In-Ground Bollard Sleeve

1. Select Installation Location:

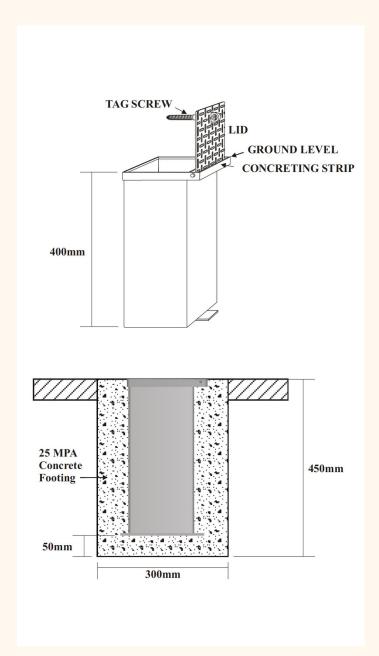
 Choose the desired location for the in-ground bollard sleeve, considering factors such as traffic flow, safety requirements, and aesthetic considerations.

2. Prepare the Site:

 Excavate a hole at the chosen location using appropriate tools and equipment. The dimensions of the hole should accommodate the size of the bollard sleeve and allow for proper installation.

3. Check Alignment and Level:

- Before inserting the bollard sleeve, ensure the hole is aligned with your intended layout and is levelled to provide a stable foundation.
- Insert the Sleeve.
- Place the galvanized in-ground bollard sleeve into the excavated hole, ensuring it sits flush with the surface. The galvanized coating provides corrosion resistance, making it suitable for long-term outdoor use.



4. Secure in Place:

 Backfill the hole around the bollard sleeve with a suitable material such as concrete or gravel to provide stability and prevent movement.

5. Level the Sleeve:

 Double-check and adjust the position of the bollard sleeve to ensure it is perfectly level and aligned with the surrounding environment.

6. Cure or Settle:

 Allow the backfilled material to settle or cure according to the manufacturer's recommendations.
 This step ensures the bollard sleeve becomes firmly anchored in the ground.

7. Install Bollard:

 Once the bollard sleeve is securely in place, insert the actual bollard into the sleeve. Ensure that it fits snugly and is level.





8. Secure the Bollard:

 If the bollard has a locking mechanism or is designed to be secured in the sleeve, follow the manufacturer's instructions to lock it in place.

9. Inspect and Maintain:

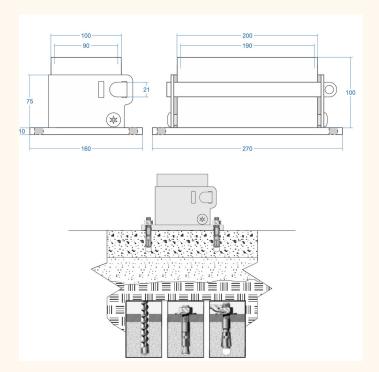
 Regularly inspect the bollard and its sleeve for any signs of wear, damage, or corrosion. Perform maintenance as needed to ensure the continued effectiveness of the installation.

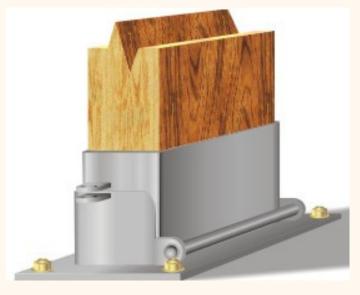
Installation in

Galvanized Above-Ground Collapsible Bollard Sleeve

1. Prepare the Site:

 Ensure the installation area is clear and level. Remove any obstacles or debris that may interfere with the installation process.





2. Assemble the Collapsible Bollard Sleeve:

 Ensure the installation area is clear and level. Remove any obstacles or debris that may interfere with the installation process.

3. Position the Sleeve:

 Place the assembled galvanized above-ground bollard sleeve in the desired location. Check for proper alignment and ensure it is positioned vertically.

4. Mark Mounting Points:

 Use a marker or pencil to mark the mounting points on the surface where the bollard sleeve will be secured. This ensures accurate placement.

5. Drill Anchor Holes:

 Drill anchor holes at the marked points to accommodate the mounting hardware. The size and type of anchors will depend on the specific requirements outlined in the manufacturer's instructions.

6. Insert Anchors:

 Insert the appropriate anchors into the drilled holes. Make sure they are securely fastened, providing a stable foundation for the bollard sleeve.

7. Attach Sleeve to Anchors:

 Securely attach the bollard sleeve to the anchors, following the manufacturer's instructions. Tighten any bolts or fasteners to ensure the sleeve is firmly in place.



8. Collapse or Extend Bollard:

 Depending on the design, collapse or extend the bollard within the sleeve as needed. Follow the specific instructions provided by the manufacturer to operate the collapsible feature.

9. Lock in Position:

 If the collapsible bollard has a locking mechanism, engage it to secure the bollard in the desired position. This step enhances stability and prevents unauthorized adjustments.

10. Inspect and Maintain:

 Regularly inspect the bollard sleeve, checking for any signs of wear, damage, or corrosion. Perform maintenance as needed to ensure the continued functionality and appearance of the installation.



Need assistance?

If you have any questions or require assistance regarding the installation of our bollard products, our dedicated team is readily available for a chat.

Feel free to reach out to us through a phone call or email, and we'll be more than happy to provide guidance and support. Additionally, we understand the importance of local expertise, and therefore, we work closely with a network of experienced installers across

Victoria.

If you prefer, we can recommend professionals in your vicinity to ensure a seamless and efficient installation process. Your satisfaction and the successful implementation of our products are our top priorities. Please don't hesitate to get in touch, and we look forward to assisting you in any way we can.

