

# Premium Steel Fence Installer Manual



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Thank you so much for your purchase! This manual will walk you through how to install Premium Steel Fence along with all other accompanying accessories. Please do not hesitate to call us at +31 548-659-012 if you have any questions about installation.



## Packaging and Unloading

All fencing posts, rails and gates come neatly packaged in/on specific crates for safe transport and handling. Typically, the heaviest crate will be 750KG - so please ensure your means of unloading at your end can sustain 1000KG + to be safe.

All the crates end and gate pallets along with the plastic mats and pallet parts can be returned to be reused.

If your fencing is going to be out in the weather for more than a couple of months during installation, we recommend storing it in a shed if possible - alternatively, the fencing can be thoroughly covered by a tarpaulin, thus making sure no moisture gets inside the plastic sleeving. Also, the crates have a unique stacking feature, where you can stack the fencing several crates high if floor space is tight.

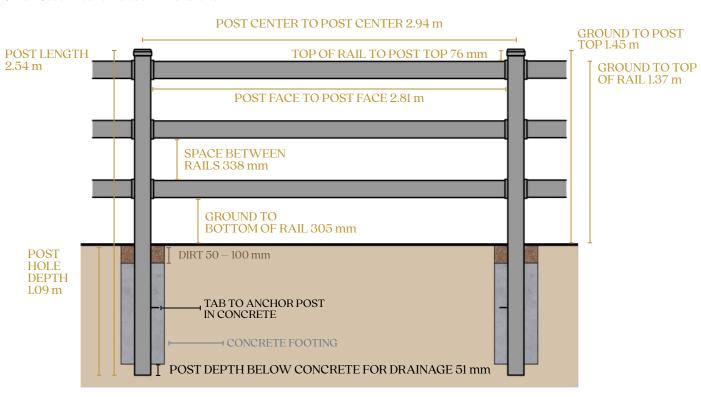
If you have any questions on how to unload, please contact us on 1800 102 233.



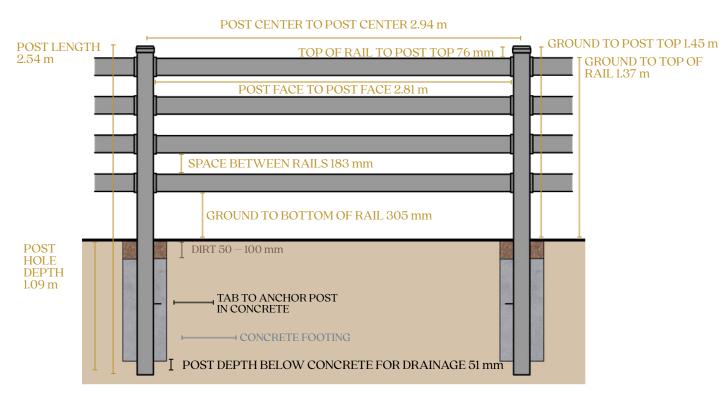
## **Fence Dimensions**

## Fence Dimensions and Specs for Install

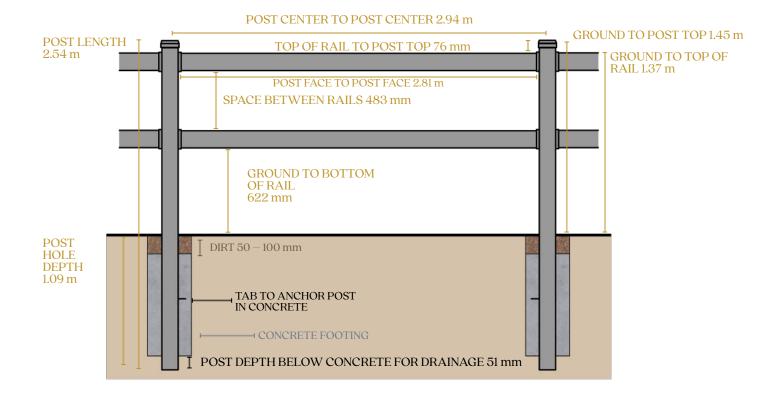
3 Rail Steel Board Fence Dimensions



#### 4 Rail Steel Board Fence Dimensions



#### 2 Rail Steel Board Fence Dimensions



## **Post Centers**

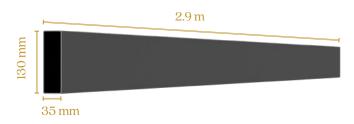
#### **Premium Steel Fence Post Centers**

Post center to post center measurements are used to measure post hole placements in the field.

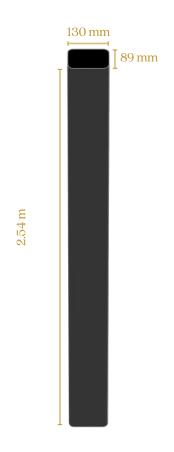
Use these measurements to mark with spray paint where to use the auger to dig post holes.

#### Post & Rail Dimensions

#### Rail Size



#### Post Size



## **Fence Installation**

#### Premium Steel Fence Installation Written Instructions

Premium Steel Fence components include 5 different post types (line, terminal/end, corner/90°, 3-way/tees, 4-way/cross), rails, lock spacer assemblies, and post caps. The posts have pre-punched rail openings lined with rubber grommets. Extra grommets and lock spacer assemblies are shipped inside each post.

Each post is 2.54 m in length and has a tab punched 610 mm from the bottom that serves to lock the post into the concrete footing. If the post must be shortened, it must be trimmed from the bottom, not the top.

The rails are approximately 2,9 m in length and have a 23° articulation allowance in any direction, allowing for hilly terrain, round yards and elegant curves. The lock spacers are inserted in each post and serve to lock the rails in place.

Refer to page 2 of this manual for dimensions and specifications.

Before you get started with installation, make sure to check local codes and permit requirements and contact your local utility companies to check for underground services such as electrical, plumbing, or cable.

### **Required Materials**

- 1. Auger with an extension rod of at least 1 m
- 2. Metal cutting saw (if trimming posts & rails)
- 3. Tape measure
- 4. Level
- 5. Rubber mallet
- 6. Multi-tool or pliers
- 7. Wood board cut to 2.810 mm for spacing gauge
- 8. Concrete (approximately three 20 kg bags per post hole)

- 9. String10. Stakes
- 11. Brightly colored spray paint
- 12. Towel/rag
- 13. Manual post hole digger
- 14. Rustoleum touch up paint (provided with every order)

## 1. Planning Your Layout Before Digging

Plan your layout ahead to ensure you get the right look such as the final placement of all your posts, paying particular attention to where any 'custom' panels might fall. In most situations, it makes sense to decide on all gate placements first. Some gates, like driveway gates, must be installed in precise locations; these should be installed first. These can be used as anchors in your project for measuring out post centers. Paddock gates can simply be installed as you work down your fence line.

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Refer to the Gate Installation Instructions on page 19.

It's important to note for planning that Premium Steel Fence sections are 2,94 m, longer than the typical section length of wood or PVC. When planning your layout, the goal is to have each section look as uniform as possible. For instance, you can evenly allow for two custom panels either side of your gate or custom panels in the corners. It is good to pick a 'methodology' of where you will put custom length panels and use that approach throughout your property.

After planning your layout, you can begin installation, ideally at a gate. When installing a Premium Steel gate post, the fence post is installed at a 75 mm gap for proper latch installation. From the first fence post, measure and mark with spray paint or stakes where your post centers will go. Use a string line at exactly 2940 mm post center to post center.

When encountering an obstacle such as a corner, building, or gate, the post spacing distance will likely be shorter. Set the post where it needs to be to accommodate the obstacle. Plan to trim the rails to fit. Details on how to trim rails can be found on page 11.



## 2. Digging the Holes

Before digging the post holes, mark all utility lines using information from your local utility compant. For safety, we recommend carefully hand digging if next to any utility lines.

- 1. For standard post holes use a 300 mm auger with a 1 m extension rod. Dig post holes 1090 mm deep (or deeper) with 2.940 mm between post hole centers on flat ground. (Figure 1)
- a. You can use as narrow as a 230 mm auger, but we recommend against this since it will require additional hand digging due to imprecision. A 300 mm auger does require additional concrete, but eliminates the need for hand digging, decreases labor costs, and improves overall efficiency.
- 2. If you encounter smaller rocks while digging the post holes, attempt to break them up. If an impenetrable rock is encountered, you will have to trim the post from the bottom with a metal cutting saw and secure it to the rock.

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- **a.** If your hole can be dug deeper than 600 mm: Manually dig the hole around the rock to lock your concrete to the rock when it sets. This will allow the post to be set as rigidly as possible.
- b. If you can't dig your hole deeper than 600 mm: Secure your post to the rock with the aid of riobar.
  - I Drill a hole into the rock that is outside of where the post will go. Drive either a long bolt or a cut piece of rebar into the hole you drilled. When the concrete is poured, the concrete surrounds that rod and becomes part of the rock.
  - II Put the post into the hole next to the rebar, then pour the concrete. The rebar and concrete become one, securing the post



## 3. Setting the Posts

- 1. Plan to set posts beginning at corners, end posts, or obstacles in the fence line.
- 2. Once your post and rail crates are unloaded from the truck, cut the banding and remove the packaging.
  - a. Each post and rail comes in its own polyethylene sleeve which are perforated long-ways, allowing for easy re moval. The lock spacers come packaged within each post.
- 3. Remove the polyethylene sleeve upon placing it into the hole or after most of the installation is complete if you want to protect the posts from mud and dirt.
- 4. Bend out the post anchor tab to at least 45° (and not more than 90°) before placing it in the auger hole
  - a. To bend the tab you can use a screwdriver, a multitool, set of pliers, or channel lock tool. You can bend the post tabs at the same time on all posts and then walk them to their holes, or do them one at a time as shown. The post anchor tabs prevent post movement.

- 5. Put the fence post into the hole, then push it into the ground 25 mm to 50 mm, or tap it down using a rubber mallet.
  - **a.** Tapping the post down the last inch or two enables drainage to the soil once the concrete is set. This is a critical step; enabling drainage prevents the post from filling with water.
- 6.. Set the post 1090 mm in to the ground and to a height of 1500 mm above the ground.

Note: these measurements are standard and can be adjusted depeding on your desired finished height.

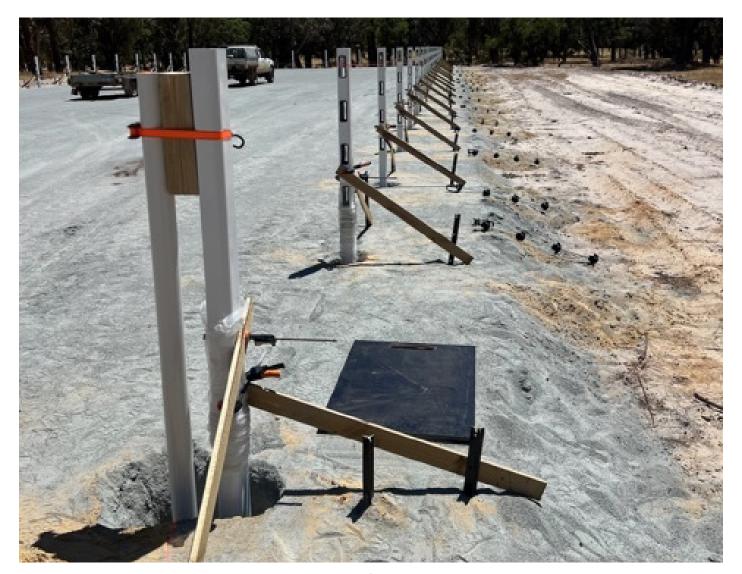


- 7. Set all remaining posts the same way. Use a cut piece of wood measuring 2.810 mm as a spacing gauge to streamline the spacing of the posts.
  - a. Lay the wood spacing gauge flat on the ground and contact both posts at their base. Butt each post tightly to the wood nose while setting the next post.
  - b. Double check that the post is plumb and square with your levels after removing the wood gauge.
  - c. Eyeball your fence line before tapping it down, making sure it appears straight.
    - I Using a wood spacing gauge will help you navigate sloped terrain since you're automatically compensating for the slope. In other situations, like an arena installation or a rounded layout, it ensures proper rail engagement. Additionally, you don't have to use a tape measure, increasing efficiency as you're setting the fence line.



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- 8. Once the fence line is set, pour concrete all the way to the bottom of the hole, using at least 60kg of concrete per post hole.
  - **a.** A hydraulic concrete mixer such as a Mud Hog is recommended for larger jobs, as it pays for itself in the first 1500 m, however it is not required.
- 9. Work concrete into the hole by using a steel rod to poke air out of the concrete. Avoid shaking the post since it can cause the post to come out of alignment.
- 10. Use a level to ensure the post is plumb in both directions, in line with the other posts, and not rotated out of square. To ensure plumbness, use a level on each side of the post or a fence plumb.
- 11. Once the concrete is poured, fill the rest of the hole with dirt. Wipe off any concrete that might have splashed onto the post.
- 12. Use a string line strung across the top of approximately 15 posts. Ideally start at a terminal post, moving down the fence line in 15 post sections.
  - a. Attach the string line to two terminal posts in the section, both measuring 1450 mm from ground to top of post. Set all of the line posts between the terminal posts to that string line.
  - b. The nominal height of the line posts will be 1450 mm from the ground, but will vary with the terrain. Make sure to eyeball the line when nearing completion of the section, ensuring posts are at the correct height before the concrete sets.



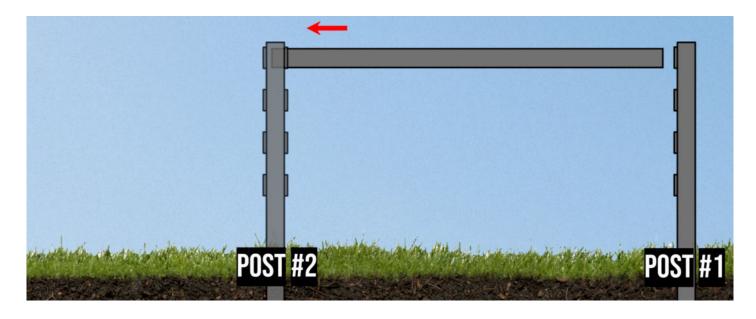
## 4. Inserting the Rails

Once the concrete is completely set, the rails can be mounted. The concrete should be allowed to set at least 24 hours before you begin mounting the rails.

Line and end posts come with grommets already installed. Corner, tee, and four-way posts only have grommets installed on one side allowing them to fit into the crates for shipment. Therefore, corner, tees, and four-way posts will require inserting grommets before rails can be mounted. 95% of the grommets come preinstalled to your posts.

Extra grommets are packed inside the corner, tee, and four-way posts. We recommend mixing an all purpose cleaner/degreaser (e.g. Simple Green) and water to dampen the grommets and ends of your rails. This eases the insertion of the rails into the rubber grommets.

Premium Steel Fence requires no nails, screws or fasteners for installation. Instead, our post and rail system utilizes the lock spacer. Our lock spacers simplify installation and make rail replacement quick and easy for our customers. The lock spacer holds rails in place snugly but also allows up to 45 degrees of articulation. In order to properly insert your rails, you will need to remove lock spacers as you move down the fence line and then replace them to lock your rails into place.



- 1. Insert one end of the rail into the top rail opening of Post #1.
- 2. Swing the rail into position and insert the other end into the top rail opening of the adjacent post (Post #2).
- 3. Push the rail until it contacts the backside of Post #2, leaving space for the lock spacer to drop into place in Post #1.
- 4. Drop a lock spacer into the top of Post #1, ensuring it rests on the inserted rail.
- 5. Pull the rail back firmly against the lock spacer to secure it.
- 6. With the lock spacer correctly in place, insert the remaining rails in this section.
- 7. Pull all rails snugly into the lock spacer at Post #1—this prevents accidental falls that could chip or damage lower rails during installation.

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- 7. Move to the next section and repeat the previous steps.
- 8. Continue this process for each section until the fence line reaches the next corner or terminal post. Ensure you replace the lock spacers in the posts as you go. Please note that corner and tee posts have unique lock spacers that conform to corners and tees.



Above: Lock spacer being dropped in to line post. Below: Lock spacer resting on the inserted rails.



## 5. Cutting Rails

There are some circumstances when you will need to cut rails. Planning your fence line helps to avoid having to shorten multiple sections. If you need to shorten a section, you can cut the rails to a shorter length.

- 1. Measure the distance between the two posts.
- 2. Add 90 mm to that measurement.
- 3. Cut the rail to that length using a metal cutting saw, We recommend applying the provided touch up spray paint to the cut ends to resist future corrosion.
- 4. Once the paint is dry, insert the cut rails following the same procedure you used to insert the other rails.



## 6. Mounting the Post Caps

We recommend waiting to install your post caps until all the rails have been inserted. Before you mount your post caps, verify that every single post has a lock spacer installed.

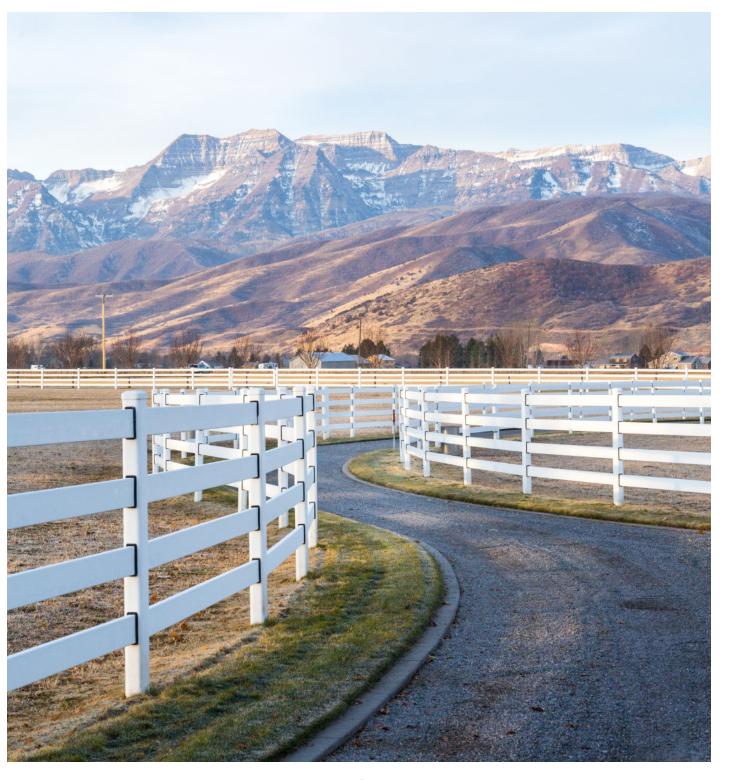
- 1. Place the post cap on top of the post.
- 2. Place a towel over the post cap.
- 3. Gently pound down with a rubber mallet to secure the post cap. Make sure it is resting squarely on top of the post.
- 4. Continue down the fence line installing post caps on each post.



We recommend waiting three days before letting large animals such as horses or cattle back into the fenced area. This ensures the concrete footings are beyond at least half of their rated strength. Livestock will likely test the fence and could cause unnecessary damage if concrete footings are not adequately set.

When fence installation is complete, reusable crate ends and gate pallets can be returned.

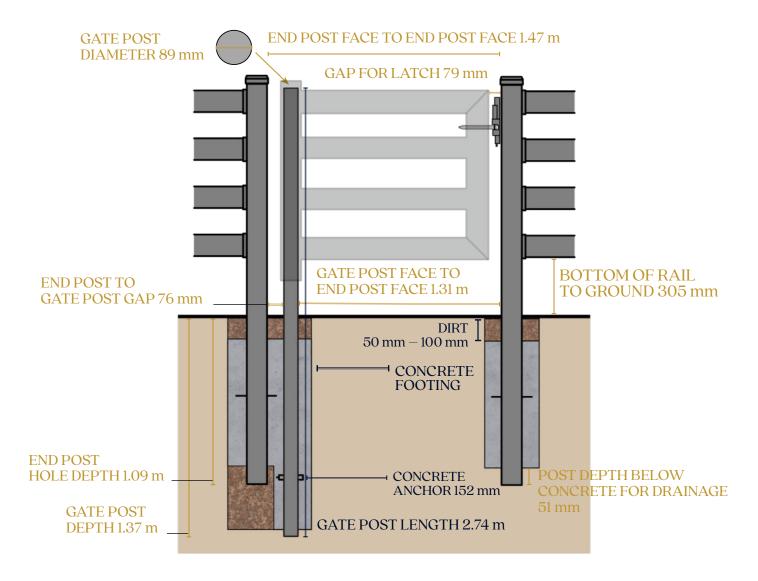
Thank you for your purchase! Please don't hesitate to contact us at info@stockandnoble.com.au or 1800 102 233 if you have any questions about installation. Thank you for choosing Premium Steel Fence.



## **Gate Dimensions**

#### **Stand-Alone Gate Dimensions**

Stand-Alone 1.22 m Gate Dimensions with EZ Latch

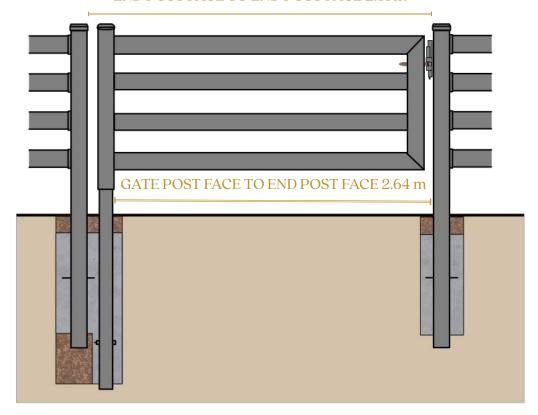


The installation dimensions for all stand alone Premium Steel Fence Gates are the same for all three sizes of gate, EXCEPT for the End Post Face to End Post Face measurement and the Gate Post Face to End Post Face measurement. These differentiating measurements are marked in the following figures in blue.

- End Post Face to End Post Face dimensions are exact and must be within  $\pm 3$  mm.
- End Post Face to Gate Post Face is exactly 75 mm. Reference page 20 for setting the spacing between End Post Face to Gate Post Face.

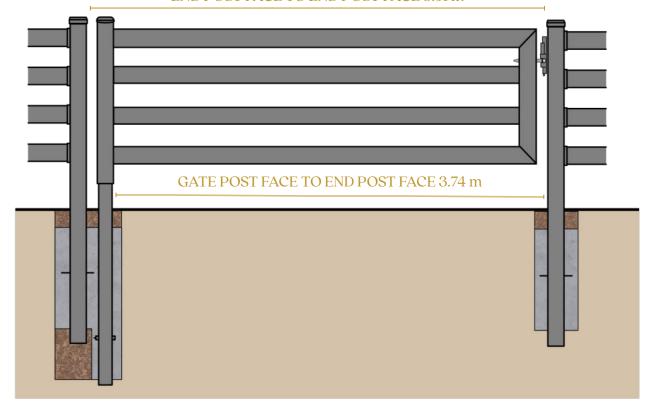
Stand-Alone Section Gate (~2.55 m) Dimensions with EZ Latch

#### END POST FACE TO END POST FACE 2.81 m



Stand-Alone 3.66 m Gate Dimensions with EZ Latch

#### END POST FACE TO END POST FACE 3.91 m

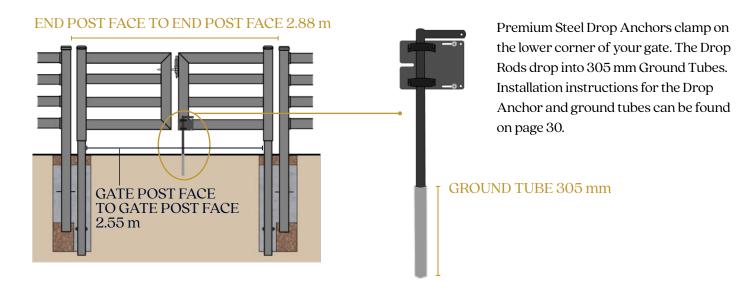


#### **Dual Gate Dimensions**

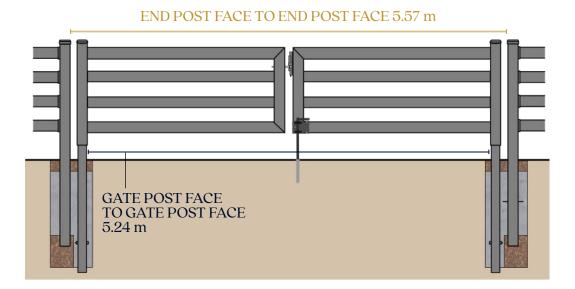
Dimension for any combination of Premium Steel Fence gates if used as doubles. Refer to the Stand-Alone Gate Dimensions on page 14 for individual gate dimensions.

For Dual Gates, you will measure from End Post to End Post and from Gate Post to Gate Post.

Dual 1.22 m Gates Dimensions



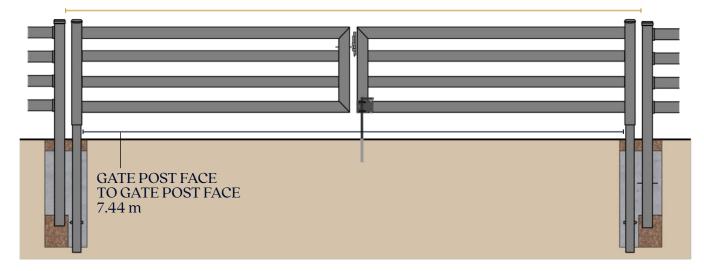
**Dual Section Gates Dimensions** 



The nominal opening between gate faces for Dual Gates is 108 mm when an EZ Latch is used. When not using an EZ Latch, the gap between gate faces is 83 mm. In this case, 25 mm should be removed from the End Post Face to End Post Face Spacing.

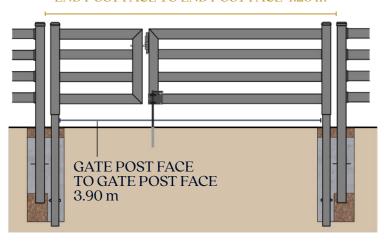
#### Dual 3.66 m Gates Dimensions

#### END POST FACE TO END POST FACE 7.77 m



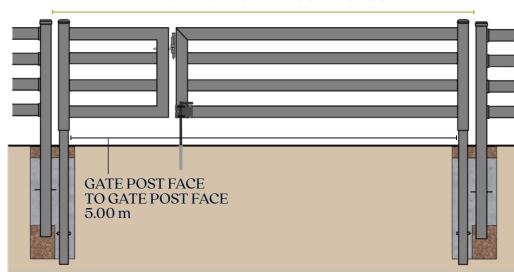
1.22 m + Section Gate Dimensions

#### END POST FACE TO END POST FACE 4.23 m

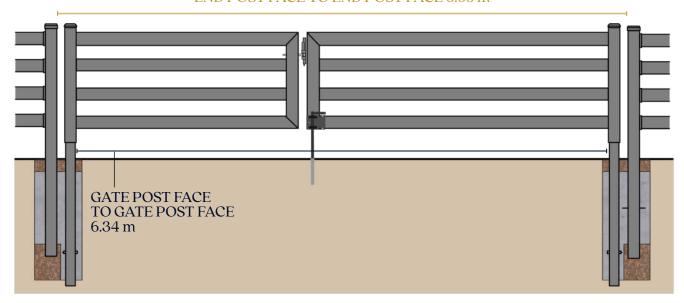


1.22 m + 3.66 m Gate Dimensions

#### END POST FACE TO END POST FACE 5.32 m



#### END POST FACE TO END POST FACE 6.66 m



\*\*\*Gate Post Face to Gate Post Face Dimensions are reference only and rounded to the nearest 5 mm. End Post Face to End Post Face Dimensions are exact and must be within the nearest 3 mm.

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## **Gate Installation**

#### Premium Steel Steel Board Gate Installation Written Instructions

These instructions are for installing Premium Steel Gates on a new fence installation.

## **Required Materials**

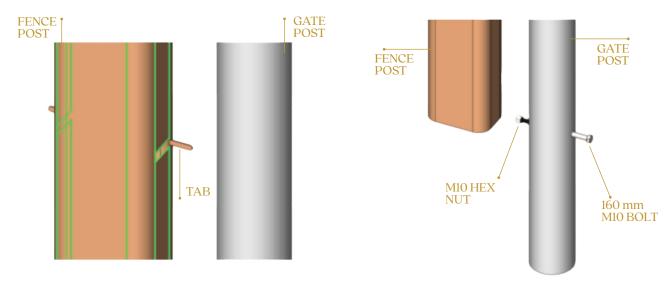
- 1. Auger with extension
- 2. Tape measure
- 3. Level
- 4. Line level
- 5. Crescent wrench
- 6. 8 mm allen key
- 7. Five 20kg bags of concrete mix
- 8. Stretch wrap
- 9. Two 38 x 89 mm C24 timber for spacing gauge

### Parts Provided

- 1. 89 mm diameter gate post
- 2. Gate (includes bearing assemblies)
- 3. Gate cap
- 4. 160 mm M10 bolt
- 5. M10 hex nut
- 6. EZ Latch

## 1. Prepping the Posts

- 1. To prep the fence post for installation, bend out the post anchor tab with a screwdriver, set of pliers, or channel lock tool to at least 45° and not more than 90°. (Figure 1)
- 2. To prep the gate post, slide the 160 mm M10 bolt through the pre-drilled hole to anchor the bottom of the heavy round gate post, then screw the M10 hex nut on to the bolt. (Figure 2)



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Figure 1 Figure 2

## 2. Digging the Holes

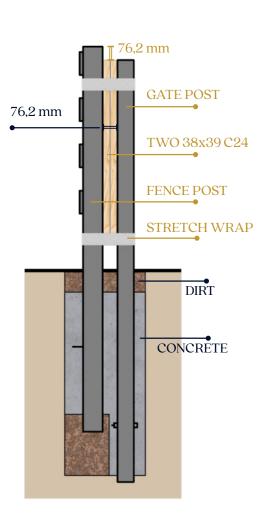
1. When digging the hole for both the gate and fence post, dig a hole 1.300 mm deep and at least 300 mm in diameter.\*\*\*

a. Hand digging will be required if the auger does not reach this depth or if close to an obstacle or electrical line.

When digging the hole for the fence post on the latch side of the gate, you will install it the same way as any other Premium Steel Fence post. These holes will be 1.092 mm deep and 305 mm in diameter. To learn more about digging the holes for standard Premium Steel Fence posts, please refer to our fence installation instructions on page 6.

### 3. Setting the Fence Post & Gate Post

- 1. Set the gate post in the hole with a 75 mm gap to the fence post. Plumb and square the gate post using two 38 x 89 mm C24 pieces of timber which will provide spacing for the 75 mm gap.
  - a. Additionally, please note that the top of the gate post should be exactly 75 mm below the top of the fence post.
- 2. Wrap shrink wrap around the posts and  $38 \times 89$  mm C24 pieces to hold them together. This will keep them together as the concrete sets (Figure 3).



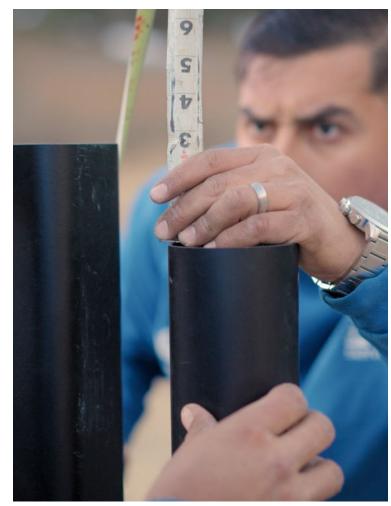


Figure 3

Figure 4

- 3. Either manually push the gate and fence post into the ground 25 mm 50 mm, or use a dead blow hammer to tap them down.
  - a. Tapping the post down 50 mm enables drainage to the soil once the concrete is set. This is a critical step; enabling drainage prevents the post from filling with water.
- 4. Do this until you measure 1370 mm from ground to top of the gate post. The fence post height should measure 1450 mm. Ensure the distance between the posts' heights is exactly 75 mm and the gate and fence posts are square (Figure 4).



Figure 5

- 5. Depending on the gate size, measure the correct distance from the gate post face to the fence post face. No matter what size gate you're installing, gate post height is 1370 mm. Find accurate measurements for our gate dimensions on page 14. Dimensions for each gate size will vary.
- 6. Use a line level on your string line to ensure that the two fence posts are at the same height.
- 7. Pour approximately five 25 kg bags of concrete all the way to the bottom of the hole, stopping 50 100 mm below ground level.
- 8. Work concrete into the hole by using a steel rod to poke air out of the concrete. Avoid shaking the posts to work the concrete in since this can take them out of alignment.
- 9. After the concrete is poured, check again that the gate post is plumb and the height is correct in case of movement (Figure 5).
- 10. Once you're happy with the setting of the gate and fence post, fill the rest of the hole with dirt.
- \*\*\*If you are installing a gate post next to an existing fence post or wall, you will dig a 1300 mm hole with a 254mm diameter adjacent to the existing fence post or wall. Gate installation in this scenario is otherwise similar to installing it with a fence post.

## 4. Assembling and Leveling the Gate

- 1. Wait 48 hours for the concrete to set before assembling the gate. Then, remove the  $38 \times 89 \text{ mm C}24$  timber and stretch wrap.
- 2. Lift the gate over the gate post. This can be done with a skid steer or lifted by a crew of 2-3 people (Figure 6).
- 3. Jiggle the gate to be sure the top bearing catches the top of the gate post. All of our gates have an upper and lower bearing. When the gate is placed on its gate post, the top will be seated firmly in the upper bearing inside the gate. Once seated, there should be very little play in the gate when lifting the end.



- **4.** To rotate the lower bearing and level the gate, remove the two screws from lower bearing at the bottom of the gate. The two holes used to rotate the lower bearing are directly below the screw holes on the bearing (Figure 7).
- 5. To rotate the bearing, insert a 8 mm allen key into the pre-punched holes and pull (Figure 8).
- 6. While one person is rotating the lower bearing, a helper should be lifting the weight of the gate to allow for easy rotation of that lower bearing (Figure 9). Throughout this process, place a level on the top rail of the gate. Repeat the process of lifting the gate and rotating the bearing until the gate is level.
- 7. Once the gate is leveled, line up the empty bearing screw holes with the closest holes in the gate hub bottom, then replace the screws. Torque until tight.
- **8**. Look down the fence line and judge the final position of the gate relative to the fence's top rail. The top rail of the gate should match the height of the top rail of the fence.
- 9. Screw the gate post cap on, either clockwise or counterclockwise. There is a locking mechanism on the gate post cap which locks with a quarter turn of the cap. The gate post cap will simply click into place. If you need to remove the cap in the future, simply rotate a quarter turn in either direction.
- 10. When the gate is level, opening and closing easily and quietly, you have finished assembly.



Figure 7



Figure 8



Figure 9

## **EZ Latch Installation**

#### EZ Latch Installation onto Premium Steel Fence

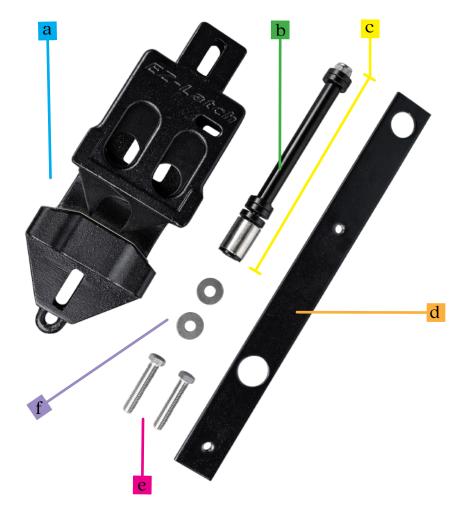
Leveling and aligning the gate must be done before mounting the EZ latch. Please refer to page 22 for instructions on leveling the gate.

## Required Materials Parts Provided (Figure 1)

- 1. 10 mm keyless chuck drill
- 2. 13 mm Drill Bit \*
- 3. Adjustable wrench
- 4. 8 mm allen key
- Marking pen

- a. EZ Latch Kit which includes:
- b. Flanged support tube
- c. latch pin
- d. Mounting plate
- e. Two bolts
- f. Washers

Figure 1



## 1. Setting the Latch Pin

- 1. Place enough washers on the latch pin (Figure 1) to allow the end of the pin to clear the latch post by 13 mm or slightly more. Insert the pin into the pre-drilled gate hole from the outside.
- 2. Slide the flanged support tube onto the pin from the inside of the gate around the latch pin (Figure 2).
- 3. Check the pin gap to the latch body. Adjust the washers to gap out between 13 mm and 19 mm.
- 4. Place the remaining washers and nut onto the pin (Figure 3).
- 5. Tighten the latch pin nut to 27 Nm by using a 8 mm hex key in the end of the pin to hold it from rotation while tightening the nut.

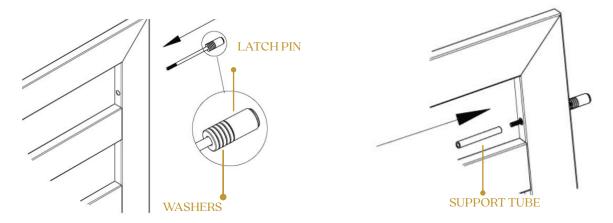


Figure 1 Figure 2

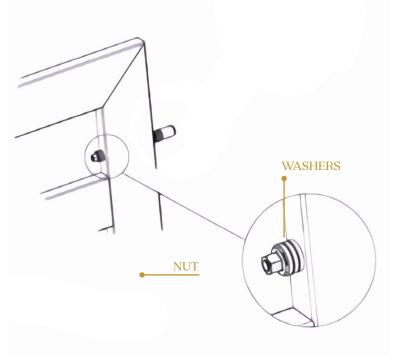
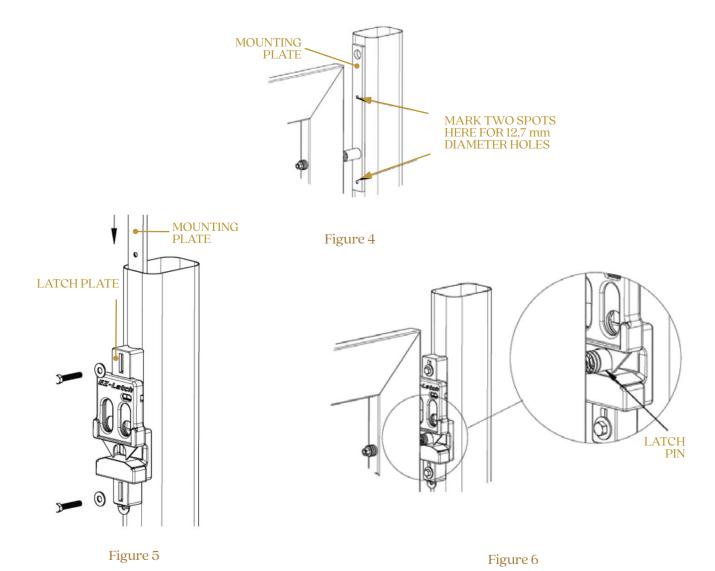


Figure 3

<sup>\*</sup>A step drill is preferred that starts small and steps up to 13 mm. If not available, we suggest multiple drills.

### 2. Mounting the Latch

- 1. Using the mounting plate, mark two hole centers shown on Figure 4. Assure they are centered on the inside of the latch post.
- 2. Drill two 13 mm diameter holes at the marked spots (preferably with a step drill).
- 3. Position the mounting plate on the inside of the post. As a safety measure, you may tie a string through the hole to allow retrieval of the plate should you accidentally drop it. Mount the top screw and washer through the latch by putting the screw through the drilled holes and then through the mounting plate (Figure 5).
- **4.** Finger tighten the latch to the post using the two screws and washers. With the screws snuggled into position, swing the gate into the latch.
- 5. Push the latch upward to contact the latch pin and torque the mount screws to 27 Nm (Figure 6).
- 6. The bolt slots allow for 13 mm adjustment up and down. Adjust as required. Your latch is now secured.
- 7. Test your latch both ways. Be sure the pin slightly raises the gate when closing.



## **EZ Latch Onto Wood**

#### EZ Latch Installation onto Wood

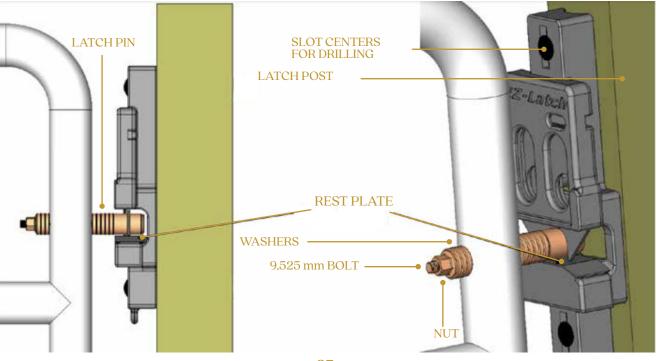
The EZ Latch works with almost any gate including wood, PVC, or pipe. The following instruction are for EZ Latch installation on a wooden post. Installation is similar with a few notable differences.

## **Required Materials**

- 1. 10 mm keyless chuck drill OR 8 mm allen key (read below)
- 2. Drill bit (size depending on method used)
- 3. Marking pen
- 4. Crescent wrench
- 5. EZ Latch Kit for wood post using lag screws

#### 1. Installation Procedure

- 1. Position the latch pin on the gate at the desired height.
- 2. Drill a clearance hole for the latch pin in gate down tube.
- 3. Position the EZ Latch to make contact with the pin on the rest plate.
- 4. Make two dots with a marker at the center of the slots on the EZ Latch for bolts (See Figure below).
- 5. Drill holes for two 10 mm lag bolts (or a 8 mm hole if using lag screws when screwing directly to the post). Stainless steel lag screws and washers are provided. Due to the various sizes of posts, the through-bolts are not included in the kit and are an optional mounting method.



# **Swinging Gate Latch**

## **Swinging Gate Latch Installation Instructions**

This popular setup is used instead of using dual drop anchors. This setup allows one of the two gates to be used as an every day gate with common latch setup. To open the second gate, lift the ground anchor. Both of the gate's lower bearings can be rotated for gate level (and fine adjustment of the latch and latch pin vertical positions). Complete the gate leveling before proceeding to mount the EZ Latch. The EZ Latch kit comes with a mounting plate which will not be used for the swinging gate latch setup. Reference the adjustable lower bearing instructions on page 22. Reference Drop Anchor installation on page 31.

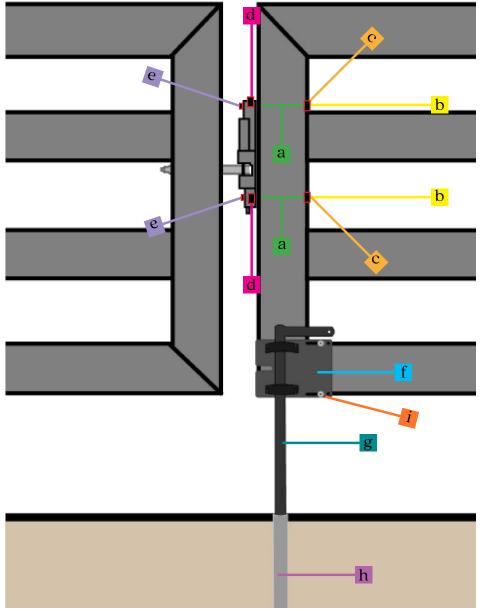
## Placement Guide (Figure 1)

One complete EZ Latch Kit (reference page 24)

- a. Two Flanged latch pin tubes
- b. Two 3/8" 16 Socket Head screws 8" long
- c. Two 3/8" 16 lock nuts
- d. Six ¼" thick washers 1" diameter
- e. Two standard 3/6" x 1" outside diameter stainless steel washer

One complete Drop Anchor kit (pre-assembled)

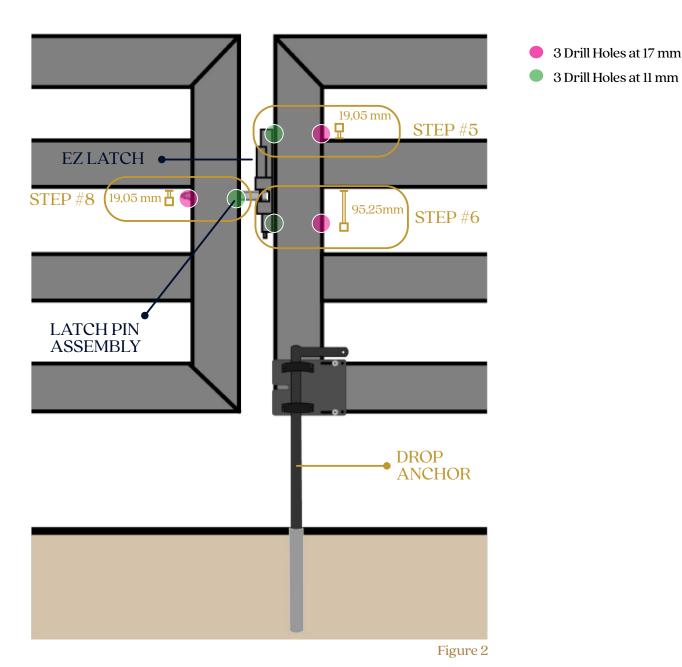
- f. Drop Anchor housing
- g. Drop tube with handle
- h. 12" (305 mm) ground tube
- i. Four 3/4" bolts



#### Figure 1

#### **Installation Procedure**

- 1. Mount the EZ Latch housing on the gate with the drop anchor. Mount the latch pin assembly on the other gate (reference page 24 for EZ Latch installation). Mount on the 2nd rail from the top (on both 3-rail and 4 rail gates). The bottom drill hole should be 95 mm from the bottom of the 2nd rail. The upper hole should be centered 19 mm from the top of the 2nd rail.
- 2. Drill three 17 mm holes (1 hole on the pin-gate; 2 holes on the ground-anchor gate) using a step drill. Reference the pink circles on Figure 2 for placement.
- 3. Drill three 10 mm holes on the outside face of both gates (1 hole on the pin-gate; 2 holes on the ground-anchor gate) using a step drill. Reference the green circles on Figure 2 for placement.
- 4. Use matching touch-up paint and primer on all drilled holes.



- 5. Insert the bolt through the thin stainless steel washer and the top latch slot in the latch. Then, insert the bolt through the two 1/4" heavy black spacer washers. Then insert through the drilled holes in the gate with the ground anchor. Slide the black flanged tube over the screw and into the larger hole inside the gate. Slip on a 1/4" heavy black spacer washer and spin down the lock nut loosely.
- 6. Repeat this assembly method for the lower slot and screw.
- 7. Lightly tighten the nuts just to hold the latch bolts roughly centered in the latch mounting slots.
- 8. Assemble the latch pin assembly through the other gate's newly drilled pin holes using the flanged sleeve. Place the 1/4" heavy black spacer washers so the pin end clears the latch body by 3 mm.
- 9. Tighten the latch pin using the crescent wrench and the 8 mm allen key to 40 Nm.
- 10. Drop the drop anchor into the ground tube to secure the gate into it's closed position.
- 11. Swing the latch pin gate into contact with the latch.
- 12. Tap the latch upward until the stainless steel latch rest plate contacts the latch pin.
- 13. Tighten the latch mounting screws to 40 Nm while maintaining this pin contact position.
- 14. Test the gate swing and latch. Adjust if necessary.

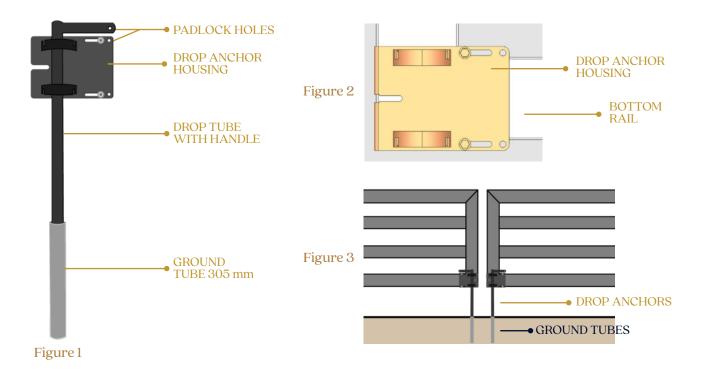


## **Gate Anchor**

## 2 Drop Anchors for Dual Premium Steel Fence Gates Installation

- 1. Clamp the drop anchor housings onto the gate ends using the two fastener sets (sets include 2 barrel nuts and four 3/4" bolts). The nuts fit closely to the top and bottom surfaces of the bottom rail (Figure 2).
- 2. Force the inside surface of the mount housing tight to the gate face. Torque the 4 screws while holding the long nut until tight. Assure the housing is square to the gate.
- 3. Swing the two gates into the optimal closed position. Look down the gates to assure they are in line.
- 4. Drop the drop tube with handle to the ground. Mark the exact spot for the ground tubes.
- 5. Install the ground tubes in the ground vertically, either by driving them down or digging a hole and concreting them in place. If concrete is used, tape the tube bottom during fill to keep the concrete out. Assure the drop pin can penetrate the ground tube to the earth bottom.
- 6. The drop tubes with handles are made extra long for various terrain issues. After installation, lower the pin until the padlock holes in the handle and housing align. When marking the cut point, allow for a bit of extra clearance to accommodate any debris that may accumulate in the tube over time. (Figure 3).
- 7. Once the ground tubes are set, clear out the dirt from inside the tubes and drop the handles into the tube.
- 8. Lift the drop pins to the up and twist in order for the gates to swing.
- 9. Ensure all fasteners are tightened.

Note: An additional ground tube is available for purchase if you'd like to secure the gate in the open position.



# Wire Mesh Clip Placement

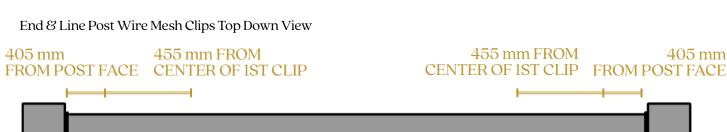
## Wire Mesh Clip Placement Diagrams

For the standard wire mesh system shown in red, the number of wire mesh clips needed per section is 11. We recommend purchasing slightly more clips than needed in case of error.

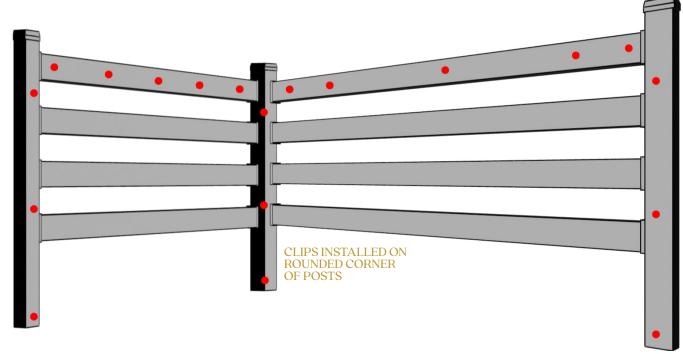




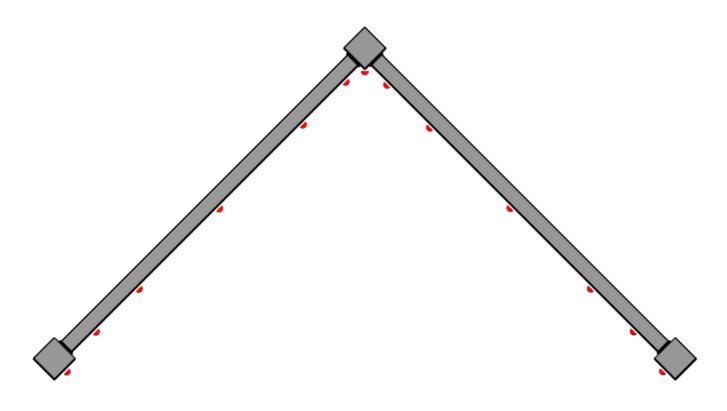
End & Line Post Wire Mesh Clips Front View  $455\,\mathrm{mm}\,\mathrm{FROM}$ 405 mm 405 mm 455 mm FROM  $455\,\mathrm{mm}\,\mathrm{FROM}$ CENTER OF 1ST CLIP FROM FROM FROM POST FACE CENTER OF 1ST CLIP POST FACE POST FACE 1143 mm FROM GROUND 635 mm FROM **GROUND** 50 mm FROM GROUND



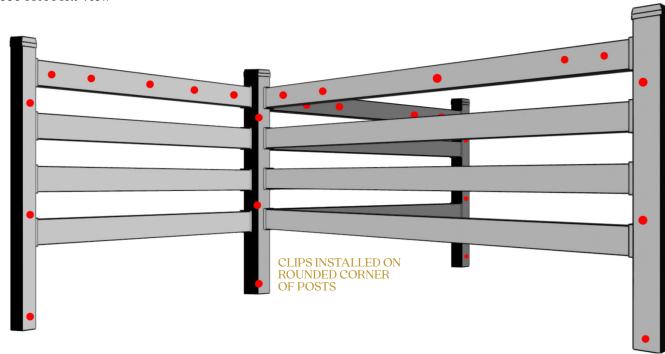
#### Corner Post Front View



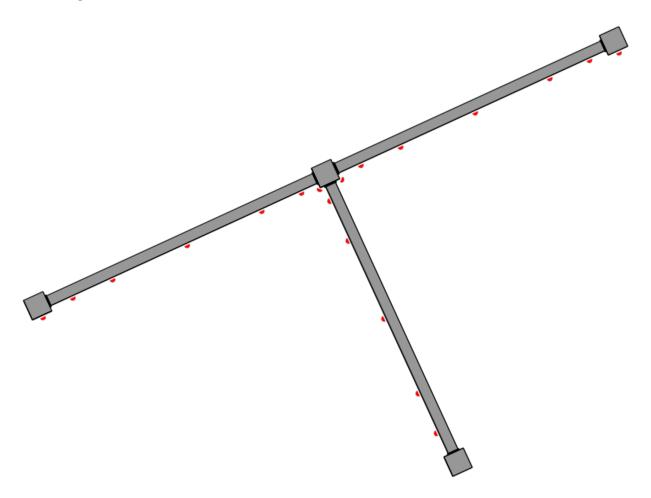
Corner Post Top Down View



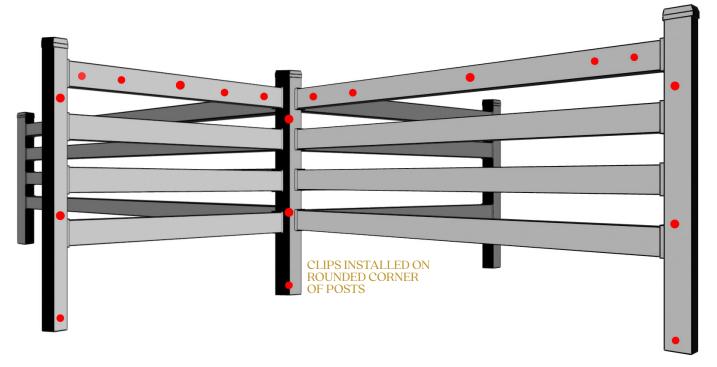
#### Tee Post Front View



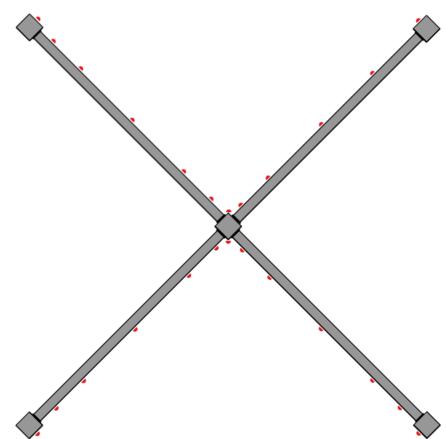
Tee Post Top Down View



#### 4-Way Post Front View



#### 4-Way Post Top Down View



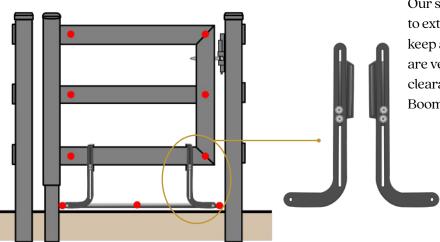
Wire mesh clips can be applied on either side of the enclosure if using tee or 4-way posts. Placement may depend on where animals are placed in the enclosure. It's possible to install wire mesh on both sides, but usually not necessary. Please ask your sales representative for specific recommendations for unique situations.

## Wire Mesh Clip Placement on Gates

## 3 Rail Gates

For 1,22 m and Section gates, 9 wire mesh clips are needed. For 3,66 m gates, 12 wire mesh clips are needed. Please reference diagrams below for wire mesh clip placement on 3 rail gates.

1,22 m & Section Gate (~2,55 m) Placement



Our steel Boomerang Brackets allow you to extend any wire mesh beneath gates to keep animals from getting underneath. They are vertically adjustable to optimize ground clearance. Refer to page 39 on how to install Boomerang Brackets to Premium Steel Gates.

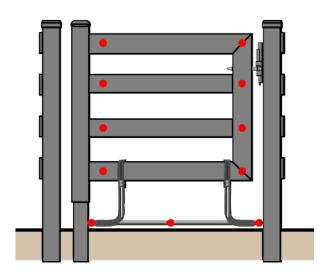
#### 3,66 m Gate Placement



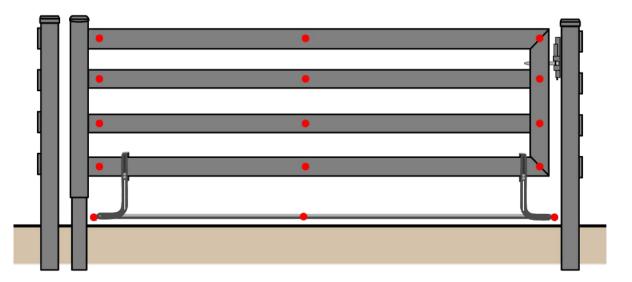
## 4 Rail Gates

For 1,22 m and Section gates, 11 wire mesh clips are needed. For 3,66 m gates, 15 wire mesh clips are needed. Please reference diagrams below for wire mesh clip placement on 4 rail gates. See page 39 for instructions on how to install the Boomerang Brackets to your gate.

1,22 m & Section Gate Placement



3,66 m Gate Placement



# Wire Mesh System Install

## Wire Mesh System for Premium Steel Fence Installation Instructions

Our Wire Mesh Clips allow an easy way to add any wire mesh to your Premium Steel Fence, PVC, pipe, or any hollow tube fence. We recommend PVC-dipped wire mesh for abrasion protection on the fence coating and the most striking look.

### **Required Materials**

- 1. No. 2 Phillips Driver
- 2. Step drill
- 3. Chain link wire mesh; galvanized and black PVC coated recommended, but any wire mesh will work with this system.

## 1. Drilling the Holes

- 1. Position wire mesh over the fence in the desired stretched position.
- 2. Drill holes in the posts and rails in accordance with the dots show in the Wire Mesh diagrams starting on page 32. Ensure it aligns with the desired stretched wire mesh positioning.

### 2. Installing the Wire Mesh Cips

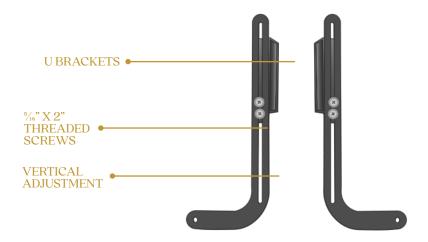
- 1. Insert a Wire Mesh Clip into one of the holes you've just drilled.
- 2. Mount the wire mesh through the wire mesh clam shell. Ensure that the mesh is placed in a way that it is controlled vertically and horizontally. Do this by positioning the two teeth that are on the clamshell wash clamp across both a vertical and horizontal wire.
- 3. Insert the No. 2 Phillips-driver into the drill. Torque the Wire Mesh screw onto the fence until snug (do not over tighten). As you torque the screw, the rubber well nut will seal the hole, ensuring no damage to the fence finish. If using chain link, stretch it lengthwise first, and while it's being held in place, attach it using wire mesh clips. Avoid pulling the mesh directly against the fasteners.
- 4. Repeat steps 3-5 for the remaining Wire Mesh Clips.



## **Boomerang Brackets**

## Installing Wire Mesh onto Gates Using Boomerang Brackets

Our steel Boomerang Brackets allow you to extend any wire mesh beneath gates to keep animals from getting underneath. They are vertically adjustable to optimize ground clearance.



## **Required Materials**

- 1. Vertical tension bars (not supplied by Premium Steel Fence)
- 2.35 mm round galvanized steel tubing with pressed ends
- 3. Two stainless steel M8 x 50 mm fully threaded screws with 6 M8 stainless steel nuts (not supplied by Premium Steel Fence)
- 4. Chain link wire mesh; galvanized and black PVC coated recommended, but any wire mesh will work with this system.
- 5. Premium Steel Fence Boomerang Bracket Mounting Kit

### 1. Boomerang Brackets Install

- 1. Slip the two U brackets over the gate bottom rail as shown with the boomerang brackets facing outward.
- 2. Adjust the height of the boomerang brackets by loosening the slide screws, and retighten once positioned. Swing the gate to assure this position works without ground interference.
- 3. Cut the steel tubing to span the length from one boomerang mount hole to the other with the caps attached.
- 4. Slide the M8 stainless steel screws through the end caps and nut them tightly. Next, put on a second nut, slide through the boomerang bracket hole, and put the third nut at the end. Position the two nuts to securely mount the tube and tighten.

- 5. Mount the wire mesh to the gate using the Premium Steel Wire Mesh Clips. Use three clips, top, middle and bottom of the gate on each end. When drilling the half inch holes, be sure not to punch through the other side of the rail.
- 6. As seen below, use wire ties to fasten the bottom of the mesh to the bottom tubing.
- 7. Once complete, swing the gate to assure clearance. Adjust, as necessary.



STEEL TUBING WITH CAP ENDS

VERTICAL TENSION BAR



## **Hot Wire Insulators**

#### Hot Wire Insulators Installation Instructions

Our Hot Wire Insulators can be used to easily add any hot wire or tape to your Premium Steel Fence, PVC, or pipe fence. Recommended when using Premium Steel Fence to contain large draft horses like Fresians and Belgians. For horses, we recommend hot wire across one to two rails. For cattle, apply to top and bottom rail.

## **Required Materials**

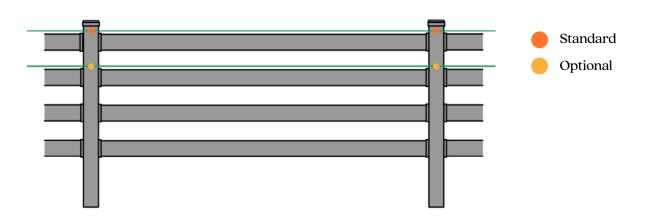
- 1. Step drill or 13 mm bit
- 2. Long #2 Phillips Bit





## 1. Installing the Hot Wire Insulators

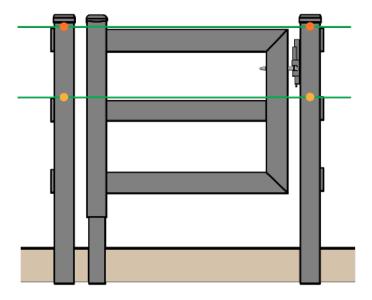
- 1. Drill holes using the step drill in the posts in accordance with the Hot Wire diagram below. Center the holes on the post face and at the height desired.
- 2. Mount the hot wire through the hot wire insulator.
- 3. Insert the Phillips bit into the drill. Screw the Hot Wire Insulator onto the fence. As you drill, the rubber well nut will seal the hole, ensuring no damage to the fence finish. Torque until snug, do not overtighten.
- 4. Repeat steps 2-3 for the remaining Hot Wire Insulators.



#### **Hotwire on Gates**

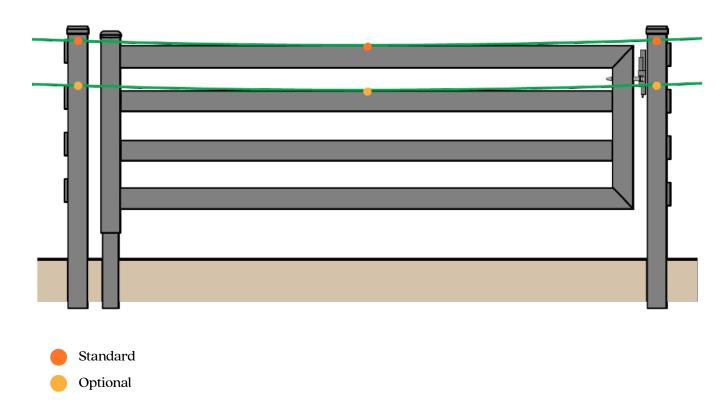
#### 1,22 m & Section Gate Hot Wire Placement

Hot wire insulators do not need to be installed directly to either 1,22 m gates or Section gates. Install the hot wire insulators as normal on the fence posts.



#### 3,66 m Gate Hot Wire Placement

In the case of 3,66 m gates, one hot wire insulator should be installed in the center of the gate in order to prevent hot wire from sagging.



# **Arena Footings Bracket**

## Premium Steel Arena Footings Bracket Installation Instructions

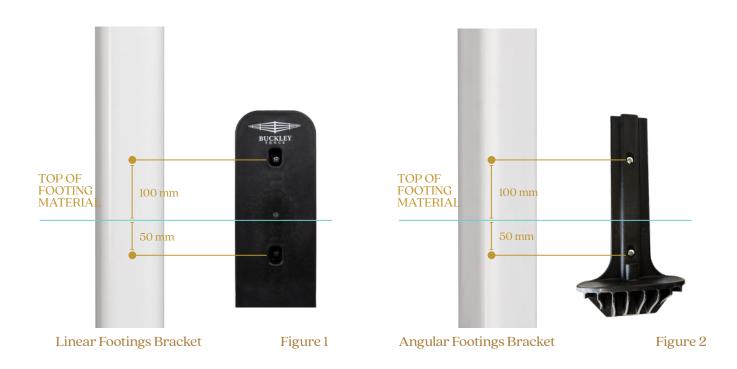
Arena Footing Brackets attach to Premium Steel Fence to keep expensive footing material contained in arenas. Eliminates the need for wooden boards, and offers more longevity and ease of installation. Premium Steel offers linear arena footings brackets for straight fence lines as well as angular arena footings brackets for any fence line curvature from a 90 degree corner to a 180 degree straight line. We recommend using our linear footing bracket for straight line runs since they are simpler and lower cost.

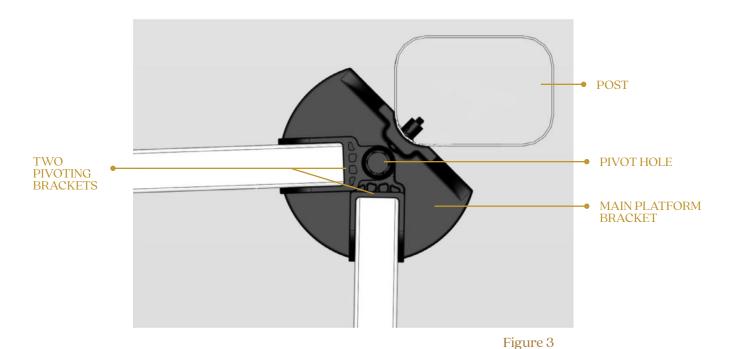
## **Required Materials**

- 1. Step drill that steps up to 13 mm
- 2. String
- 3. Marking pen

## 1. Marking the Drill Holes

- 1. Determine the desired top height of your footing material. String a line down the fence line at this level.
- 2. Measure 100 mm above the string and mark the post.
- 3. Measure 50 mm below the string and mark the post. These lines will be where you will drill into the post to mount the bracket. On corner posts, drill these holes at the mid point of the post corner radius.





## 2. Installing the Linear Bracket

- 1. Using a step drill, drill one 13 mm hole on each marked line (100 mm above top level of footing material and 50 mm below top level of footing material). Each hole should be drilled approximately on the center of the post face ( $\sim$ 65 mm from the edge of the post) (Figure 1). It is okay if the drill walks off the line you measured since the mounting holes are slotted to provide minor adjustments.
- 2. Once the holes are drilled, insert the rubber well nuts.
- 3. Place the mounting bracket over the well nuts and insert one of the screws into the top slotted hole. Screw into the well nut; do not tighten down fully.
- 4. Insert the second screw into the bottom slot on the mounting bracket and tighten fully. Then tighten the top screw until snug, do not overtighten.
- 5. Insert rails into brackets from the top, one or two rails per side. End posts will only use one side of the bracket.

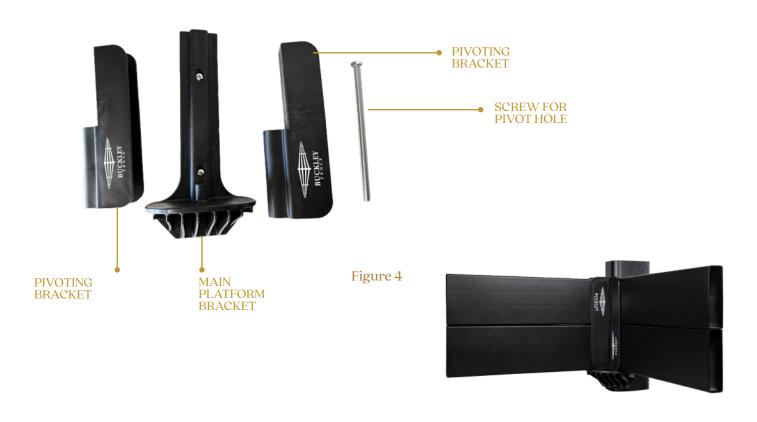


Linear Footings Bracket

## 2. Installing the Angular Bracket

1. Using a step drill, drill one 13 mm hole on each marked line (100 mm above top level of footing material and 50 mm below top level of footing material). Each hole should be drilled approximately at the center of the post corner radius as shown in the diagram. (Figure  $2\,8\,3$ ) It is okay if the drill walks off the line you measured since the mounting holes are slotted to provide minor adjustments.

- 2. Once the holes are drilled, insert the rubber well nuts.
- 3. Place the main platform bracket over the well nuts and insert one of the screws into the top slotted hole. Screw into the well nut; do not tighten down fully.
- 4. Insert the second screw into the bottom slot on the main platform bracket and tighten fully. Then tighten the top screw fully.
- 5. Once the main platform bracket is installed on the corner, slide the two pivoting brackets onto the main platform bracket. (Figure 3 & 4)
- 6. Drop the screw into the pivot hole such that it engages the base. The screw functions as a pivot only and does not require a nut or torquing.
- 7. Insert the footing rails into the angular brackets from the top. You can use one or two rails for this purpose depending on the height you want the top of the footing material.



Angular Footings Bracket

# Solar Light Caps

## Solar Light Cap Installation Instructions

Our Solar Light Caps are wireless, 100% solar-powered LED lights that mount on our post caps and turn on automatically at night. 450 lumens.

**Required Materials** 

1. No. 2 Phillips head Screwdriver

2. Rubber Mallet

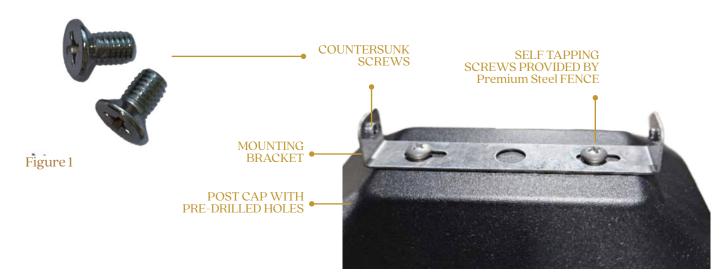
3. Towel/rag

#### Parts Provided

- Solar Light Cap Kit which includes:
- Solar Light Cap
- Mounting bracket
- Countersunk screws
- Self tapping screws for wood post (not needed for installation to Premium Steel Fence)
- 6. Premium Steel Fence provides:
- Solar Light Mounting Post Cap with pre-drilled holes
- Self tapping screws for post cap

## 1. Mounting the Bracket

- 1. Place the pre-drilled cap on the post and tap on it with the rubber mallet until it is fully seated flat on the post top.
- 2. Cover the post cap with a rag so as not to damage the Mounting Cap surface.
- 3. Remove the mounting bracket from the Solar Light Cap box and center it onto the mounting cap.
- 4. Place the self tapping screws provided by Premium Steel Fence through the slots on the mounting bracket and into the pre-drilled holes on the mounting cap (Figure 2).
- 5. Snug up the screws with the No. 2 Phillips screwdriver.



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Figure 2

## 2. Mounting the Solar Light

- 1. Remove the two countersunk screws from the hardware bag. The anchors and self tapping screws in this hardware bag are not needed for this installation and can be discarded.
- 2. Remove the Solar Light Cap from the box. Press and hold the button found underneath the solar panels (Figure 3) until the lights come on. If the light does not turn on, leave the cap face up so the solar panels are exposed to the sun for at least an hour. After solar charging, press and hold, then release, then press and hold the button again to turn the light on.
- 3. Lights will flash briefly to indicate the light is on. Lights will turn on automatically at night.
- 4. Align the two mounting holes on the bottom of the Solar Light Cap (Figure 3) to the holes on the mounting bracket.
- 5. Place the two countersunk screws into those holes and tighten the screws with the No. 2 Phillips head screwdriver.
- 6. Repeat these steps for every post getting a Solar Light Cap (Figure 4).

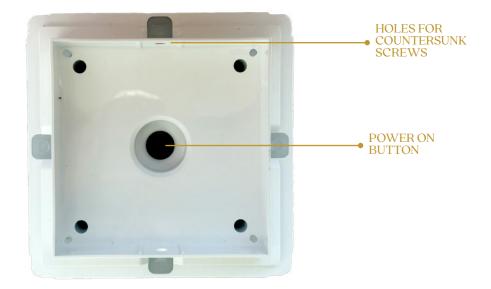
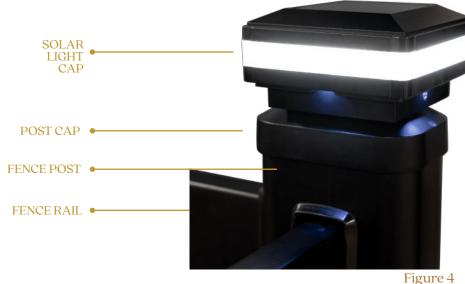


Figure 3



## "Beautiful fencing, you'll be proud of forever"

