



## ELEMENT SCREENING

PalmSHIELD has a reputation for providing user-friendly installations. We complete as much of the installation in our manufacturing facility for you. We have been working directly with installers for over a decade to improve our overall ease of installation.

At the onset of your installation, you can look forward to:

- Design drawings were prepared and approved for your site-specific layout.
- All of our posts, planks and rails are pre-cut per your site layout.
- Our hinges are pre-mounted to the gate frames. The remaining half is packaged to be field welded to the steel gate post. You may request that we fully install your hinges if you are sure of site conditions.
- Our drop rods are all pre-mounted to the gate frames.
- Our internal locking devices are all pre-installed on the gate frames.
- You will receive a system layout drawing that numbers all the posts. The posts are all labeled on the bottoms to coincide with the drawing when necessary.
- All PalmSHIELD projects are fully photographed before packaging. These photos are shared with you in advance of shipping, so you know what to expect.

Important site related items to review before beginning installation.

- Every PalmSHIELD installation was initiated with a fabrication drawing. This drawing is the basis for your installation. Though the Element screening system has some flexibility, it should be installed to the layout drawings to assure even panel dimensions and an aesthetic finish.
- Unless stated otherwise on your fabrication drawing, PalmSHIELD systems are to be installed level. As most systems are installed outdoors, most exterior paving is not level. If your surface is not level, you will need to verify and plan accordingly.
- Element screening may follow the slope of your surface but this may detract from the overall finished appearance of a contemporary horizontal plank finish.
- Review the swing of your gate. Will it interfere with any other surface like raised equipment pads, sloped concrete and curbing?

## Hardware included with your PalmSHIELD system

1. Ball bearings. These are packaged separately. One ball bearing per hinge.
2. Drop rods. These are pre-installed on the gates.
3. Locking devices. These are pre-installed on the gates.
4. Hinges. Half of the hinge is pre-installed on the gate post. The other half is packaged to be field welded unless instructed otherwise.
5. Stainless steel screws. These are packaged separately. One screw type for fastening the rails to the posts.
6. Keys. These are packaged separately. Two keys for each internal locking device.
7. Paint. Packaged separately.

## Hardware not included.

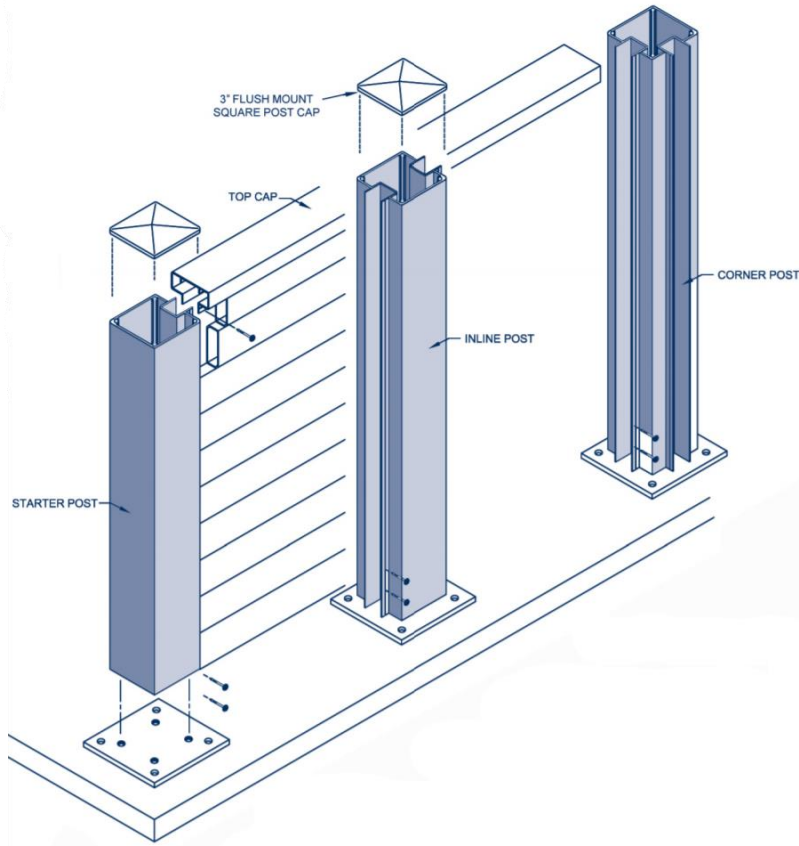
- Post anchors are not included, if required. Based on 4000 psi concrete, you may consider 5/8" x 6" epoxy anchors or 5/8" x 5 1/2" wedge anchors. PalmSHIELD is not responsible for determining anchor type or installations. This should be determined by qualified individual based on site conditions.
- Padlocks for locking devices. If you requested a hasp type lock in lieu of our internal locking system.

## Pre-installation Preparation

1. Using some form of marking chalk or paint, layout your system in accordance with your included fabrication drawings. If you do not have these drawings, please inquire with PalmSHIELD for a copy.
2. Layout each run from outside of post to outside of post.
3. Layout gate openings from inside of post to inside of post.
4. Element screening is designed to stair step the panel. If stair-stepping the panels, you might want to calculate the overall drop of each run so that you can evenly drop each post so that the stair-stepping is consistent from panel to panel.
5. If wanting to avoid changing elevations, identify the highest elevation on your site where the system is to be installed. This may be your benchmark for setting your posts. All of your posts will have to be installed to this elevation. A couple hints to make this easy.
  - a. Start at the highest elevation and level each panel as you go. OR
  - b. Run a string line along the installation. Set it flush at the point of highest elevation and then level it over the balance of the installation. OR
  - c. Use a site level and determine the change in elevation at each post.
  - d. As the elevation drops, you may have to shim under any plated posts to bring these back up to the same elevation.
6. Always start your PalmSHIELD system at a permanent structure such as a building or wall. It is best to start here and work out into space where you may have some flexibility and not worry about gaps against a building.

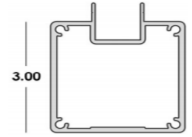
## Installation Steps

1. Verify your posts, planks and rails compared to your fabrication drawings to assure every piece was accurately fabricated. We recommend laying out the material for each panel in the order it will be installed. If you identify an error, please contact us as soon as possible and prior to any installation. PalmSHIELD will be responsible for fabrication errors but not installation costs as a result of these errors.
2. Element screening allows you to set all your posts and later install the panels, OR you may install in our traditional post, panel, post....fashion.
3. Select your first post based on the drawing. Posts are labeled in accordance with the drawing. You should verify if it is a corner, end, or gate post from the fabrication drawing. The post is stamped under the base plate, OR you will denote by its channels along the sides.
4. Set your first post. Make sure your post is plumb in all directions.
5. Measure post to post with the dimension provided in the drawing.
6. Set your second post.
7. Insert tongue and groove bottom rail. Bottom rails shape and dimensions will be shown on your plans for easy identification. Closely follow your fabrication drawings for the location of this rail relative to the top of the post. Systems are designed so that the last plank finishes at the top of the panel and is encompassed by the top cap without further cutting.
8. Level the bottom rail and use the self-tapping screws to hold it into place. 2 screws per side.
9. Install the infill composite, vinyl or aluminum planks. If a solid screen, simply stack the tongue and groove or rectangular shapes on top of one another. No screws are necessary to hold the planks but may be installed if you experience some chatter in the rails. If installing a semi-private screen, mark the location of every plank per the fabrication drawing. Level the planks and use the screws to hold the planks into place. 2 screws per side.
10. Install the top cap over the last plank. It should set flush with the top of the post. If stair stepping, it should sit level with one of the two posts.
11. Install your cap. It is a pressure fit cast aluminum cap so gently press it into place. Do not strike it or it may break.



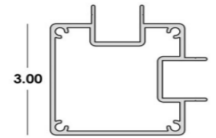
**3" Starter Post x 24' 2"**

57-63-120  
6063-T6  
Accepts  
1" Inserts



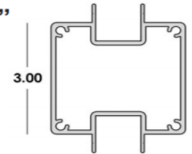
**3" Corner Post x 24' 2"**

57-63-130  
6063-T6  
Accepts  
1" Inserts



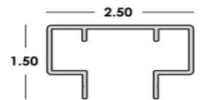
**3" Inline Post x 24' 2"**

57-63-100  
6063-T6  
Accepts  
1" Inserts



**Top Cap x 20' 2"**

57-63-110  
6063-T6



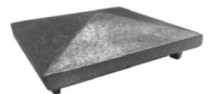
**6" Fabled Fence Post Base Plate**

10-61-365F  
6061-T6

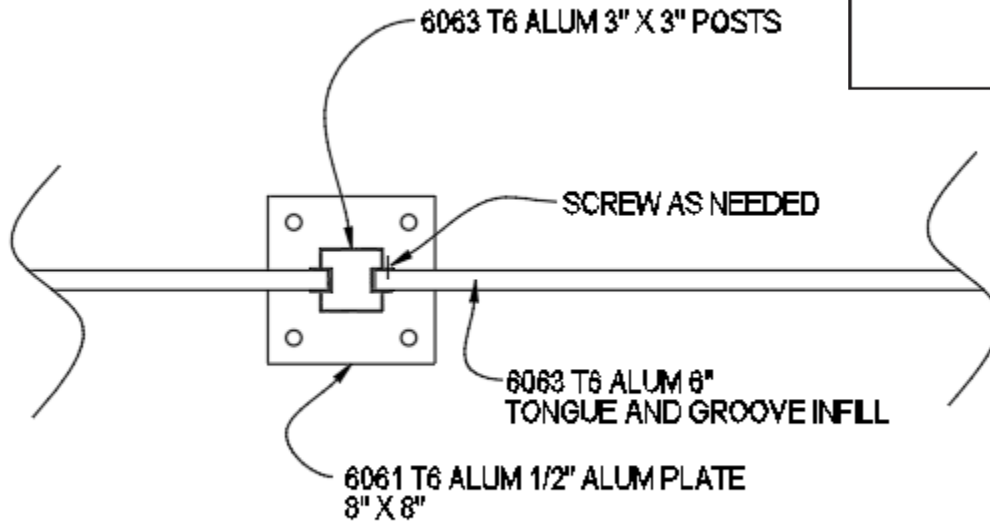


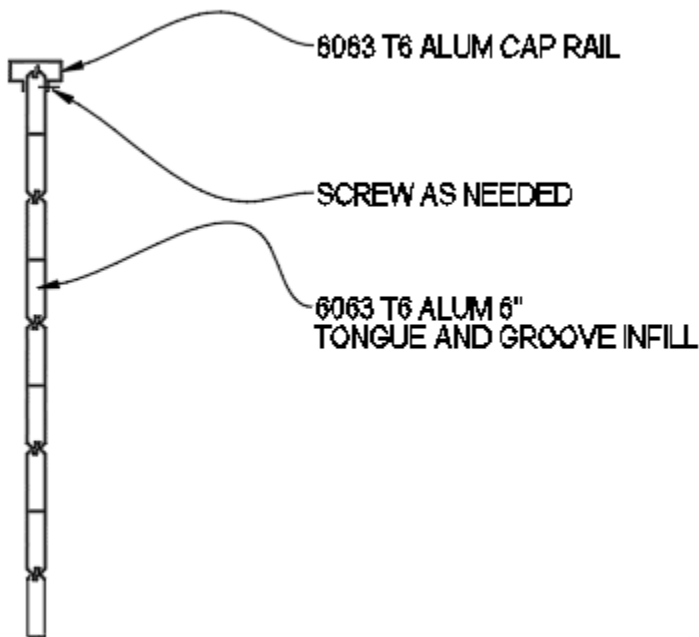
**3" Flush Mount Square Post Cap**

21-00-763



Universal 11/19/19





12. You now have assembled one panel section of your system. Repeat steps 3 through 11.
13. At gate openings, be sure to install gate posts as shown on the drawings. Be sure your openings (inside to inside of post) are accurate.
14. Gate installations will vary based on site conditions. You should consider the swing of the gate relative to the grade that it sweeps over and make sure that there is plenty of clearance. Look for steep rising slopes, adjoining equipment pads with a higher elevation and curbing.
15. Once you have determined the elevation of your gate, weld the remaining half of the gate hinge to the post. Align the gate hinge so the back of the barrel where it meets the plate is 3/8" in front of the post. In other words, there is a 3/8" gap between the barrel and the gate post.
16. Close the gate to the appropriate location. Lower the drop rod and mark the socket location. Repeat for the open position if necessary. For drop rod sockets, we recommend a 1 1/2" hammer drill or core bit. You may have to trim the drop rod.
17. The internal locking device should not require any further installation. The keys are located in the hardware package.

18. PalmSHIELD includes touch-up paint to touch-up the top of screws and any deformities. Closely inspect your installation for any chips or scratches. Hold the can 6" to 8" from the area to be painted and sweep across it until entirely covered. The paint will blend with the powder coated surface.

#### Tools Needed.

- Hammer drill bits for anchors. To be determined by contractor.
- 1 ½" hammer drill or core bit for drop rods (if required).
- Hammer drill bits.
- Drill(s)
- Level
- Marking tape or paint
- String line.
- Rubber mallet
- Welder (if required for gate installations on steel posts)