

INSTALLATION PROCEDURES FOR PEDESTRIAN GATES ONLY
800-466-1850 <support@prowellwoodworks.com>

FOR PEDESTRIAN GATES

In-swinging gates are set to the far edge of the post or jambs. Out-swinging gates to the near edge.

All hinges are surface-mounted. Do NOT mortise in the hinges. Install the provided hinges to your gate by aligning them with the pre-set hinge holes in the edge of the gate. Because the ball-bearing hinges do not have removable pins, you must set the gate on blocks that will bring it to the desired height, normally 2" off the grade. On the post or jamb, scribe a pencil-line along the top of the upper hinge, and another scribe in from the edge of the post or jamb that is equal to the depth of the hinge setting on the gate. Re-position the gate at 90-degrees in the open position providing access to mark, pre-drill, and set the top hinge screw in place.

The top hinge, with only one screw, has been allowed to pivot its alignment to the bottom screw and prevent binding. For the bottom hinge, mark that distance depth on the post with the same dimension as the top (for 1-1/2"-thick gates, this is 1 1/2"). Mark and pre-bore the top screw hole and set this hinge screw in place. The gate is now self-supporting, and evenly hung without binding or mis-aligned hinge settings. Go ahead and set all the hinge screws for all the hinges. .

The net gate width is 5/8" less than the rough opening. Standard swing clearance is 3/8". This allows 1/4" for the surface-mounted hinges, and 3/8" for swing. It is important to **recess or mortise the latch strike plates flush to their post** or jamb, otherwise you lose the swing clearance. Often, the gates will arrive slightly wide, requiring a little planing along this latch edge (This occurs when your post or column is not plumb and we must build to the wider dimension). The gates are pre-bored for their latches upon arrival. Shipped gates will not arrive with the latches in place.

For those with Pool Code gates accompanied with Spring Hinges,: Set the spring hinge tension by using the provided Allen wrench and turning clockwise, or away from the gate, until the gate swings shut with the proper speed. Over-torquing the setting will result in a slamming gate.

Install the provided gate stops. The gate should be in the closed position, setting the latch stop snugly to the edge of the gate so the pads touch the gate. The pads are to minimize the noise of a slamming gate. The hinge stop should be set perhaps 1/16" away from the edge of the gate to prevent binding.

Latches:

The latches are configured so that in-swing gates see the horizontal latch bar on the inside, or residence side of the gate. Out-swing gate has this horizontal latch bar on the street side, upon approaching the gate. The latch-side gate-stops for the bronze Euro latch can be cut to allow the clearance of the 1/2"-thick plate.

Gate Jambs: The jambs are not pre-bored, to insure that the mounting bolts are not inadvertently aligned to mortar joints. The mounting bolt bores should be recessed so the nuts are flush to the surface. For 2-1/4" gates, the wider, 4" jambs should have their bores staggered. It is suggested that jambs that are mounted to masonry surfaces be applied to the back of the jambs with weatherizing tape once the bores are drilled. This tape is to prevent decay from developing between the jamb and wall where there is no light or air and where moisture can collect.

Set the jamb against the wall or column and mark the hole placement by using a punch or drill. Set the jamb aside and drill out a hole into the masonry using a masonry bit approximately 2-1/2" deep (take a pencil and test the depth of the hole to insure you have reached the desired depth before setting the bolts). While boring, it helps to have a can of water nearby, cooling your bit frequently to prevent it from overheating and growing dull. Reset the jamb in place and insert the masonry bolts. Back off the nut to flush with the end of the bolt and tap the bolt lightly into place. Do this with all the bolts of a given jamb and then, using a ratchet, tighten the nut until the jamb is snug and firm. Do not over-tighten. If you are using Spread-Bolts, the opposite end of the bolt expands within the hole. The bolt heads are hidden by the accompanying gate stops. Check to insure the jambs are plumb. If not, use shims where needed. (Note: Because every application may call for a specific type of masonry bolt and installers have their own preferences, CPW does not provide the masonry mounting bolts)

--Those gates provided with jambs have the option of adjusting the jamb clearance by loosening the masonry bolts and shimming between the jambs and masonry. Caulking or dry-packing the reveal.

--Jambs to be mounted to existing irregular stone surfaces are best mounted with threaded rod. This prevents the jamb from rocking on a high point. It can help to sculpt the back of the jamb or chisel the high stones to gain a better seat between the jamb and stone surface. The rod (3/4" dia.) is bored into the column and set with epoxy, extending proud of the stone. The jambs are aligned and marked and bored to the threaded rod placement, slipped into place and the nut tightened to secure the jambs in a plumb position. The excess rod is cut flush to the jamb and eventually concealed with the gate stop.

If you have not built your irregular stone columns, it is best to plan on mounting the jambs directly to the column block core. This requires providing CPW with a rough opening width dimension from one column block core to the other. Then determining the

depth from the block to the proudest stone face. CPW will call this out in the drawings, with jamb thickness that is 1/2" beyond this dimension to insure the gate swings unimpeded by high stones.

In the meantime, so the construction of your pillars can continue while waiting for the CPW gate, the installer must use mock jambs (The jambs are 3-1/2" wide for both 1-1/2" and 2-1/4" thick gates). The mock jambs are temporarily fixed to the pillar core to allow setting the stone. Once the stone is set, the temporary jambs can be removed and when the gate arrives, installing the permanent CPW jambs for a solid seating to the block core.

Electronic released gates: The Magna Locks are our choice for electronic release access. They are surface mounted and allow the gates to continue to expand and shrink with the seasons. One plate is surface-mounted to the jamb(which has been laminated to an appropriate thickness here in the shop) The back of this jamb has been dadoed to accept the cat-5 wiring that will arrive installed in the jamb and stubbed out at the bottom. If you are mounting to a wood post, the plate will arrive with a conduit thread and conduit can be run exposed down the post to the connection box. The corresponding Z-plate is mounted to the gate stile.

Gate Posts: Your post height is best extended 3-3/4" beyond the height of the gate at the hinge and lock spring-points. The slip-over post caps are set by pre-drilling 1/8" holes on four sides and setting the cap to the post using a tube of construction adhesive or adhesive caulking, working the cap into place before nailing it to the post. Check to insure the cap is set squarely and not tilted. Four pre-drilled holes--on each side of the cap, and set with exterior screws to insure the cap will not cup or warp in years to come.

POST SETTING

(The Example Post Hole sketch can be found on the Fence Pricing and General Information page, under the Site Map)

Fenceline posts are set on a bed of 3-inches of gravel to allow better drainage beyond the vulnerable bottom-cut. Filling the posthole with pea gravel to two-thirds its depth allows further improved drainage while eliminating the need for post stakes. (The pea gravel essentially stabilizes the post while allowing for final adjustments in plumbing) The final 6-8 inch capping of concrete acts as a washer to create stability. A slightly tapered cap will help to insure water runs away from the post. Gate posts, however, with the extra load of a hinged gate and the stress of flanking fencelines, should sit on a bed of gravel and the entire posthole filled with concrete. For these posts it is advisable to treat the post with a wood-to-dirt preservative. For fenceline posts, no preservative is needed.

POST CAPS

Posts are ideally cut 3-1/2 inches above the top rail of the fence panels. Post ends should be sealed with primer or an emulsion product.(This is particularly important when the

fence panels and posts are painted a white or light color, as the tanins from the post-ends will bleed out onto the body of the posts) Undersides of post caps should also be sealed prior to installation. Silicone adhesive caulk, or construction adhesive, applied to post end, working the cap into place. A square against the post and the bottom edges of the cap insure the cap sets level. Pre-drill through the top and screw off with four weather-resistant screws. (using finish nails may result in the caps warping, or curling.)

The caps can be ordered directly off the site, under the Site Map.

Mounting to CPW Gate Columns

For those Garden Gates flanked by the CPW Gate Columns, the procedure varies. The Columns arrive as three-sided assemblies to be slipped around your wood posts. Two faces of the Columns are detailed and exposed to face the street and residence. The other two sides are solid, parallel to the gate opening. Your posted drawing call out the exact dimensional requirement for where to set the posts in allowing for the needed clearance of the Columns themselves. In most cases, there is the net width of the gate, plus the standard 5/8" clearance (1/4" for surface-mounted hinges and 3/8" for swing clearance). In addition to this, the Column dimension is accommodated by setting the post, as a surfaced 6x6, another 2-1/16". For surfaced 4x4 posts, the post is set another 3-5/16". So a 42" net gate width using surfaced 6x6 posts will have the posts with a rough opening dimension between them at 46-7/8".

CPW provides their 4" heavy-duty butt hinge, surface-mounted to the solid face of the Column in the exact same manner outlined above, as if the column were a standard wood post.

Lighted Columns: When the gate Columns are lighted, the fixtures arrive in place and the wiring is stubbed out at the bottom of the Column, where it can be junctioned to the source as a low-voltage fixture.

CARE & MAINTENANCE

The maintenance schedule of your work varies to your preferred finish. Because Western and Port Orford cedar will swell or shrink with the seasons, it's best to seal the gate. CPW recommends either Sikkens or Cabot Stains (see below). Beyond the considerations of a finish, there are no maintenance demands to the CPW gates or products.

FINISHES

Sikkens Cetrol #1 and #23 Plus for the most durable and longest lasting oil-based finish.

(For a fuller discussion of Sikkens, you will find a link under the CPW Site Map to Finishes)



In those areas where Sikks is unavailable, we recommend **Cabot Stains**

Maintenance Timeline: *= 1-2 years, **3-6= years, ***= 5-10 years

* Clear Seal.....A natural graying with time. To prevent moisture absorption, Cabot's Clear-Seal Solution (completely invisible) should be reapplied when water no longer beads on the surface of the wood.

* Natural Oil.....A penetrating oil that enriches the wood tone while providing a water repellent seal. Cabot's Clear Solutions is recommended.

** Cabot's Semi-Transparent and Semi-Solid Stains.....The wood grain remains visible. It is a finish often preferred because the pigments provide a more organic compliment to the surrounding landscape. Requires a single coat. No primer.

*** Paint The most durable, and yet requiring one primer coat and two top coats. For gates to be painted white, all end-grains are epoxy-sealed in the shop--prior to assembly--to prevent unsightly tanin bleeding. White paint or light-colored stain finishes must be stipulated before delivery.

FINISH APPLICATION

Although sealing or staining or painting your gate does not prolong the life of the cedar, it is often a preferred aesthetic while also helping to maintain the gate's dimensional stability. In most climates, the calculated spacing between the gate and lock-side post is enough, at 3/8", to allow for normal expansion and contraction. This is compounded in certain areas such as southern Florida or Hawaii where there is often rain and intense heat within the same afternoon. These considerations are minimized by a wax emulsion coating on all gates applied in the shop to the top and bottom end-grains of both stiles.

When applying your finish, start with one side, brushing the bottom rail with the grain and then the vertical stiles with the grain to avoid the brush strokes overlapping. This is for all horizontal rails, not allowing the brush stroke to dry before brushing the vertical stile. Do not apply stain to the edges of the pickets or upper pattern on this side or the stain will run down the opposite side and leave run marks penetrating the bare wood before you are able to finish the opposite side. For those with solid lower panels, do not stain the edges of your open slots until the back side is addressed. Once you turn to the other side, you can then apply stain to the picket faces and edges, knowing the run-off will not absorb against the already stained surface. Check, when finished, the direction of your brush stroke to smooth out any overlaps. Do not, with semi-transparent stains, natural oils, or clear seals, apply a second coat once this first coat is dry. The gate has been sealed, and further applications will not absorb evenly, resulting in a splotchy build-up.

Sikks requires a 2-part application, resulting in a superior finish that provides a slight luster.

Normally two coats of the Cetrol #23 Plus, with light sanding between coats.

CHARLES
PROWELL
Woodworks



1.800.466.1850

California

Oregon

Illinois

N. Carolina

www.prowellwoodworks.com

Spray finishes: You can finish your panels with clear seal, natural oil, or semi-transparent stains using a common, rented, garden pump sprayer. This quickens the process considerably and although it may require some back-brushing, it is nevertheless much simpler than brushing a thousand pickets. This method is not advisable for semi-solid stains and paints. Spraying these requires an industrial set-up and requires back-brushing.

P.O. Box 785 Sebastopol, CA 95473
Fax: 815.328.2851