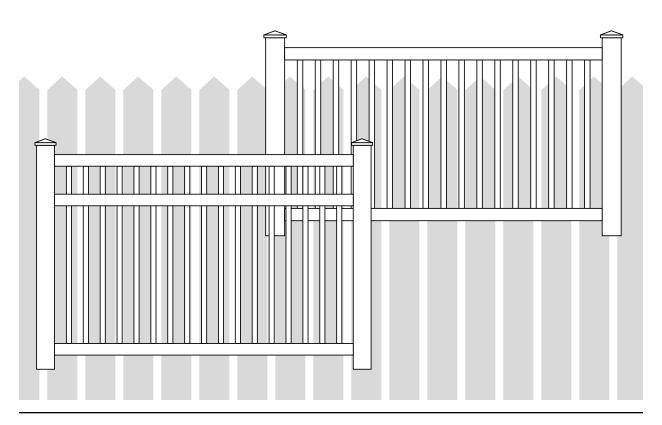


**PVC Fencing / Residential Style** 

# UNIVERSAL PANEL AND GATE

**INSTALLATION INSTRUCTIONS** 



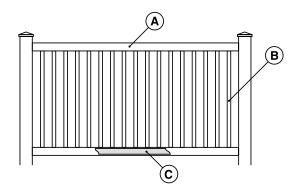


## BEFORE YOU START, IT'S IMPORTANT TO CHECK . . .

- ... That fence footings do not exceed legally established property lines. If uncertain, refer to real estate agent's line plot or consult a professional surveyor.
- ...Local codes for specifications regarding frontage locations, allowable fence heights, etc. A permit may be required.
- ... With local utility companies for locations of underground cables or pipelines.

# **UNIVERSAL PANEL**

## **PARTS LIST**

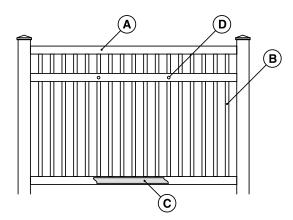


#### EACH 3' & 4' HIGH UNIVERSAL PANEL **INCLUDES:**

**A.** 2" X 3-1/2" Routed Rails (2)

**B.** 7/8" X 1-1/2" Pickets (17)

C. Galvanized Steel Insert (1)



#### EACH 5' & 6' HIGH UNIVERSAL PANEL **INCLUDES:**

**A.** 2" X 3-1/2" Routed Rails (3)

**B.**7/8" X 1-1/2" Pickets (17)

C. Galvanized Steel Insert (1)

D. #8 X 1-1/2" Stainless Steel Screws (2)

Screw Cap Washers (2)

Screw Caps (2)



#### PREPARE FENCE LAYOUT

NOTE: Standard fence sections and gates are designed for level terrain. Significant slopes in the terrain will necessitate modifications to panel kits, gate kits and posts.

#### **GENERAL INFORMATION:**

Read this instruction sheet completely before starting work.

During panel/gate assembly, work on a soft, non-abrasive surface to avoid scratching the PVC. When cutting PVC components with a power saw, use a fine-toothed blade (plywood blade, finishing blade, etc.).

Plan ahead when working with PVC glue. It dries very fast, requiring speed and precision. Laying out the fence is the critical first step toward ensuring a quality installation.

#### STEP 1

Locate the boundary lines to your property.

#### STEP 2

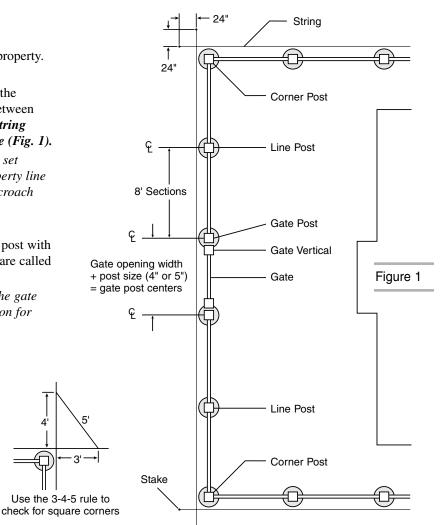
Drive stakes into the ground along the property line and stretch a string between each stake. Be sure to extend the string about 24" beyond the property line (Fig. 1).

It is recommended that all posts be set approximately 6" inside of the property line so that concrete footings do not encroach onto the adjoining property.

#### STEP 3

Mark the location of each terminal post with a stake (corner, end and gate posts are called *terminal* posts).

When determining the position of the gate posts, refer to Universal Gate section for actual gate opening.





Although post depth and hole diameter will be determined by local weather and soil conditions, holes for terminal posts and line posts are typically dug 8" in diameter for 4" square posts and 10" in diameter for 5" square posts, 30" deep with sloped sides (Fig. 2).

#### STEP 1

Dig all terminal post holes.

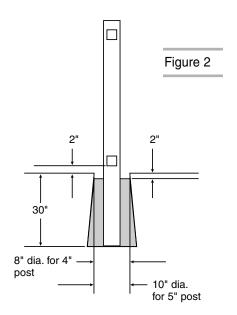
#### SET ALL TERMINAL POSTS IN CONCRETE.

#### STEP 2

Position the post in the hole. The posts should be centered in the hole and must be square with the fence line so that when the rails are inserted into the posts they will parallel the string line. Check the post on two adjacent sides with a carpenter's level and adjust as necessary to make sure it is plumb. The fence height above grade is determined at this time as well. We recommend 2" be left from the bottom of the bottom rail to the ground.

#### STEP 3

Pour concrete around post, fill to 2" below ground level. Once the concrete is completely dry, fill the balance of the hole with dirt.



3

#### **LOCATING AND SETTING LINE POSTS**

#### STEP 1

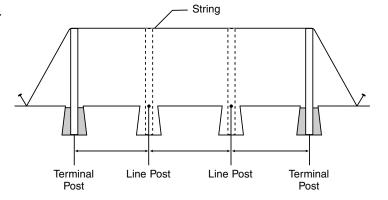
After the terminal post footings have hardened enough for the posts to remain stable, stake and stretch a string line taut across the tops of the posts to mark the desired height of the line posts (Fig. 3).

#### STEP 2

Working along the string line, stake out the positions of all line posts.

#### STEP 3

Dig all line post holes.





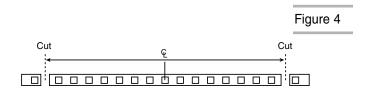
## |4

#### 4

#### **SETTING LINE POSTS AND RAILS**

#### STEP 1

If sections need to be cut to accommodate post spacing less than 8' on center, you may need to cut some from each end of rail to ensure that the distance from the post to the first picket remains equal on each end (Fig. 4). The length of the top and bottom rails should be 1/2" less than the center-to-center measurement of the posts.



#### STEP 2

Using the Legend® notching tool, notch both ends of the bottom rail with one or two notches on each side (Fig. 5). Hold the rail and the tool steady while notching, avoid twisting the tool.



Figure 5

#### STEP 3

Starting at a terminal post, slide the metal insert into the bottom rail (Fig. 6).

If the rail is going into a post which will be filled with concrete (refer to section 6, 'FILLING POSTS WITH RE-BAR & CONCRETE'), seal the end of the rail with duct tape to prevent concrete from flowing into it (Fig. 7).

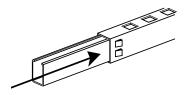


Figure 6

#### STEP 4

Slide the rail into the bottom hole in the post.

Proceeding down the fence line, place the next post into the next hole and insert the bottom rail into the post (Fig. 8).

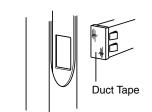


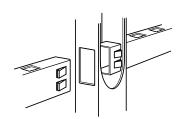
Figure 7

#### STEP 5

Fill the post hole with concrete.

Check to make sure that the post is set at the correct height, is plumb and level and square to the fence line. Block and support as necessary to keep the posts stable as installation continues.

Repeat these steps until all posts are set with the bottom rails and inserts installed.





#### 5

## **INSTALLING PICKETS**

#### STEP 1

Notch all remaining rails.

#### STEP 2

Seal the ends of top rails and mid-rails with duct tape if required (refer to section 4, 'SETTING LINE POSTS AND RAILS', step 3).

#### STEP 3

On 5' and 6' high fences, install the mid-rails at this time, with the larger holes facing down.

#### STEP 4

Slide the pickets into the routed holes in the bottom rail. On 5' and 6' high fences slide pickets through mid-rail, then into routed holes in bottom rail.

#### STEP 5

Place one end of the top rail into the post and work your way down the panel, inserting pickets into the top rail as you go (Fig. 9).

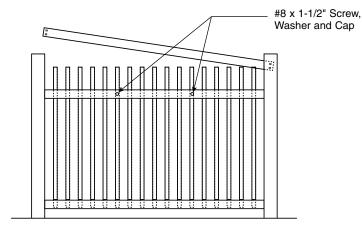


Figure 9

#### STEP 6

Once all of the pickets are installed, slide the loose rail end into the post (Fig. 10).

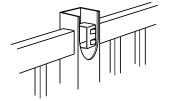


Figure 10

#### STEP 7

On 5' and 6' high fences, use two #8 x 1-1/2" screws, washers and caps to secure the mid-rail to the pickets at two points, spaced equally across the panel (Fig. 9).

Repeat these steps until all panels have been assembled.



#### 6

#### FILLING POSTS WITH RE-BAR AND CONCRETE

On 3' and 4' high fences, gate posts\* should be filled to within 2" of the top of the posts with concrete and re-bar. Corner posts and end posts should be filled half-way with concrete only. Line posts do not need to be filled. On 5' and 6' high fences, gate posts\*, corner posts and end posts should be filled to within 2" of the top of the post with concrete and re-bar. Line posts should be filled half-way with concrete only.

\* Make sure the gate hardware is installed before filling gate posts with concrete.

#### STEP 1

NOTE: If re-bar is not being used, proceed to step 2.

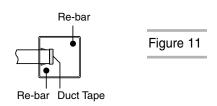
Cut four pieces of #4 re-bar 4" shorter than the post length. Drop two pieces into each post at opposing corners (Fig. 11).

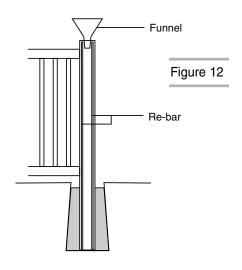
#### STEP 2

Using a large funnel, fill the posts with concrete (Fig. 12). Tap lightly on the sides of the post to help void air pockets in the concrete.

#### STEP 3

Clean up excess concrete with water before it dries.





#### 7

#### INSTALLING POST CAPS

Note: Do not install post caps on gate posts until gate installation is complete.

**EXTERNAL CAPS** (slide over the post)

#### STEP 1 (Option A)

Apply PVC glue to the inside of the cap and press completely onto the top of the post (Fig. 13). Press firmly to ensure that the cap is on as far as it will go.

INTERNAL CAPS (slide into the post)

#### STEP 1 (Option B)

Apply PVC glue to the inside of the post and slide the cap completely inside (Fig. 14). Press firmly to ensure that the cap is on as far as it will go.

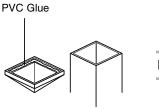
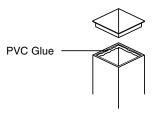


Figure 13

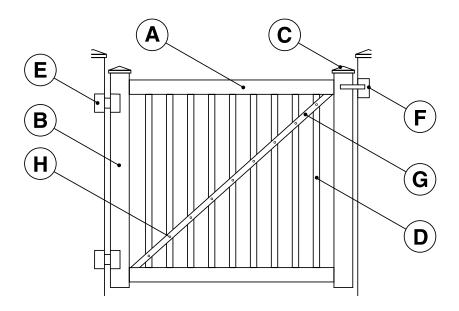




# **UNIVERSAL GATE**

#### **PARTS LIST**

Available in 3', 4', 5' and 6' heights. Gate openings for 3' and 4' high fences are 38", 50" and 62". Gate openings for 5' and 6' high fences are 39", 51" and 63".



#### EACH 3' & 4' HIGH UNIVERSAL GATE INCLUDES:

- A. 2" X 3-1/2" Routed Rails (2)
- B. 4" Sq. Gate Verticals w/Pockets (2)
- C. 4" Sq. Pyramid Post Caps (2)
- **D.** 7/8" X 1-1/2" Pickets (\*)
- E. Standard Hinges (2)
- F. Standard Latch (1)
- **G.**7/8" X 1-1/2" Diagonal Brace (1) (4' & 5' wide) Wood Insert for Diagonal Brace (1) (4' & 5' wide)
- H. #8 X 1-1/2" Stainless Steel Screws (\*) (4' & 5' wide)

Screw Cap Washers (\*) (4' & 5' wide)

Screw Caps (\*) (4' & 5' wide)

1.5 Oz. Tube PVC Glue (1) - Not shown

\* 3' wide = 5, 4' wide = 7, 5' wide = 9

#### EACH 5' & 6' HIGH UNIVERSAL GATE INCLUDES:

- A.2" X 3-1/2" Routed Rails (3)
- **B.**4" Sq. Gate Verticals w/Pockets (2)
- C.4" Sq. Pyramid Post Caps (2)
- **D.** 7/8" X 1-1/2" Pickets (\*)
- E. Heavy Duty Hinges (2)
- F. Heavy Duty Latch (1)
- **G.**7/8" X 1-1/2" Diagonal Brace (1) (4' & 5' wide) Wood Insert for Diagonal Brace (1) (4' & 5'
- H.#8 X 1-1/2" Stainless Steel Screws (\*)

Screw Cap Washers (\*)

Screw Caps (\*)

1.5 Oz. Tube PVC Glue (1) - Not shown

\* 3' wide = 5, 4' wide = 7, 5' wide = 9



#### 1

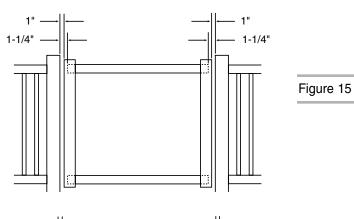
#### **DETERMINE GATE WIDTH**

Standard 3', 4' & 5' wide gates are made to fit openings measuring 38", 50" & 62" respectively, between the posts, for 3' and 4' high fences. The actual gate width will be 2" less than the opening between the posts (Fig. 15).

Standard 3', 4' & 5' wide gates are made to fit openings measuring 39", 51" & 63" respectively, between the posts, for 5' and 6' high fences. The actual gate width will be 3" less than the opening between the posts (Fig. 16).

#### STEP 1 (Option A)

On 3' and 4' high gates the actual gate width will be 2" less than your opening between posts. Cut the horizontal rails 2-1/2" shorter than the opening width between the posts (Fig. 15).



#### STEP 1 (Option B)

On 5' and 6' high gates the actual gate width will be 3" less than your opening between posts. Cut the horizontal rails 5-1/2" shorter than the opening width between the posts (Fig. 16).

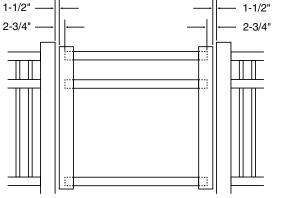


Figure 16

Make sure to cut the rails so that the space to the first picket is equal on both ends (refer to the Universal Panel section 4, 'SETTING LINE POSTS', Step 1).



## **GATE ASSEMNBLY**

NOTE: The gate verticals are not universal, they have a top and a bottom. The top gate pocket is 3" from the end of the gate vertical.

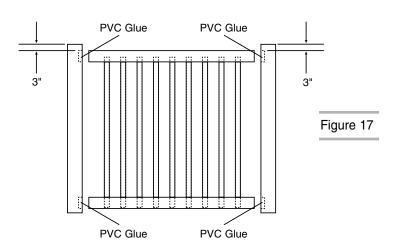
#### STEP 1

Assemble the gate panel section (rails and pickets) (Fig. 17).

#### STEP 2

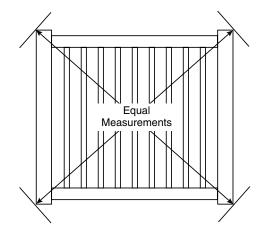
Working on one side at a time, apply PVC glue liberally to the inside of the gate sockets and quickly slide the rails completely into the sockets.

Repeat this process on the second gate vertical.



#### STEP 3

Check to make sure that the gate is square (the distance between opposite corners should be equal) (Fig. 18).

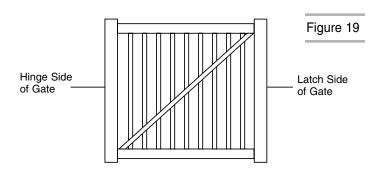




#### **INSTALLING DIAGONAL BRACE**

#### STEP 1

Position the diagonal brace (on 4' and 5' wide gates only) on the back side of the gate, between the rails and against the backs of the pickets. The gate brace should attach to the top rail on the latching side of the gate and to the bottom rail on the hinging side of the gate (Fig. 19).



#### STEP 2

If the gate kit has been modified, mark the correct length and angle and cut the brace. Cut the wood insert to match and slide the wood insert into the diagonal brace (Fig. 12).

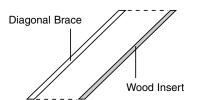


Figure 20

#### STEP 3

Hold the brace in position and carefully drill through the brace, wood insert and the back wall of each picket (Fig. 21).

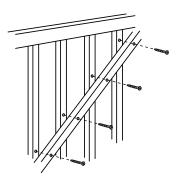


Figure 21

#### STEP 4

Secure the brace with #8 X 1-1/2" screws, screw cap washers and screw caps (Fig. 22).

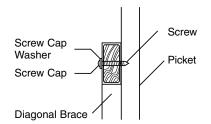




Figure 23

#### **INSTALLING GATE VERTICAL CAPS**

Install the caps on the gate verticals as described in the Universal Panel section 7, 'INSTALLING POST CAPS'.

#### HANGING THE GATE

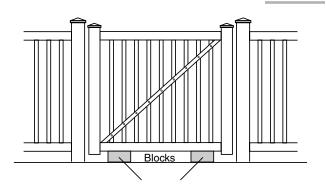
Position the gate in the gate opening and block-up the gate as necessary to line up the horizontal gate rails with those of the fence (Fig. 23). Attach hinges and latch to gate and posts per the installation instructions packaged with the hardware.

#### STEP 2

Fill gate posts with re-bar and concrete as described in Universal Panel section 6, 'FILLING POSTS WITH RE-BAR & CONCRETE.

#### STEP 3

Install gate post caps (refer to Universal Panel section 7, 'INSTALLING POST CAPS').



**CLEAN-UP** 

material as necessary with a non abrasi abrasive) mild biodegradable soap and soft plastic scouring pad. Rinse thoroughly with clean water to remove dirt and soap.

For more information, contact our Customer Service Department: 1-888-MH-FENCE (toll-free) 4000 W Metropolitan Dr., Orange, CA 92868 e-mail: info@FenceOnline.com • www.FenceOnline.com

