Endwood Privacy Fence Styles Using PostMaster Post System

INSTALLATION FOR:

Standard 6'H x 8'W Privacy Fence
PostMaster Post System
Dog Ear or Flat Top Boards
1.75" x 2.75" Rail

- Solid Board
- Shadowbox
- Board on Board
- California Style

- Storage and Handling
- Fence Preparation and Layout
- Locate and Set Posts
- Assembly Instructions
- Assembly Drawings
- Accessories and Tools
- Installation Tips

ENDURIS®

Read this instruction guide completely before starting any work.

STORAGE AND HANDLING

PVC can bow toward the sun on the sides exposed to sunlight, therefore if left uncovered and exposed on a sunny day, a bow in the rail or board will develop. Expansion on the side exposed to the sun is natural - bowing is not unexpected and can easily be reversed if it does occur. The rails and boards should be straight before fastening, therefore, it is important to follow the storage and handling guidelines. Once the fence is properly installed, the fence system reinforces and stabilizes the rail & board components minimizing bowing from exposure to sunlight. Only direct sunlight causes bowing on warm or cold days, not heat. Follow the procedures below for storing and handling the product before installation.

Important Storage & Handling Guidelines

1. Keep the rails & boards covered and protected from exposure to direct sunlight – Use bundle packaging to keep it covered - If no bundle packaging is available, use other opaque packaging material to keep the product covered and protected from exposure to sunlight.
2. Do not store or place the rails & boards on their sides or edges at any time before installation - They must be kept flat at all times prior to installation – This will help keep them assembly ready.
3. Keep the rails & boards with the binding straps on and inside the shipping packaging they were delivered in until ready for installation. Do not to remove fence material from the packaging until it is ready to be installed.

If a Rail or Board appears Bowed, Follow These Procedures Before Installation:

1. Reverse the bowed rail or board – lay it flat – with the bowed side away from the sun.
2. Exposure to direct sunlight will straighten the rail or board out on its own very quickly.
3. The rail or board can be installed once it has straightened out.
4. The rails must be completely straight before installing to the posts.
5. Make sure to follow Fence Board Installation Instructions carefully to ensure the boards are fastened straight and flat to the rails.

TOOLS & MATERIALS NEEDED

Stakes	Drill & Drill Bits	Circular or chop saw - carbide blade, 100+ tooth
Post and gate span jig	Hammer	Pneumatic nail gun
Touch-up Paint	Straight level - for setting posts	Angle Iron Quick Clamps
Shovel	String line - for post leveling	Funnel to fill posts with concrete
Post Hole Digger (or Auger)	Board spacer tool	Garden hose

SECTION 1: PREPARE FENCE LAYOUT

Important: Refer to a specific fence style to determine proper post to post location and gate opening spacing.

Before you begin, there are a few precautions that need to be taken to ensure you do not run into any complications during your fence installation.

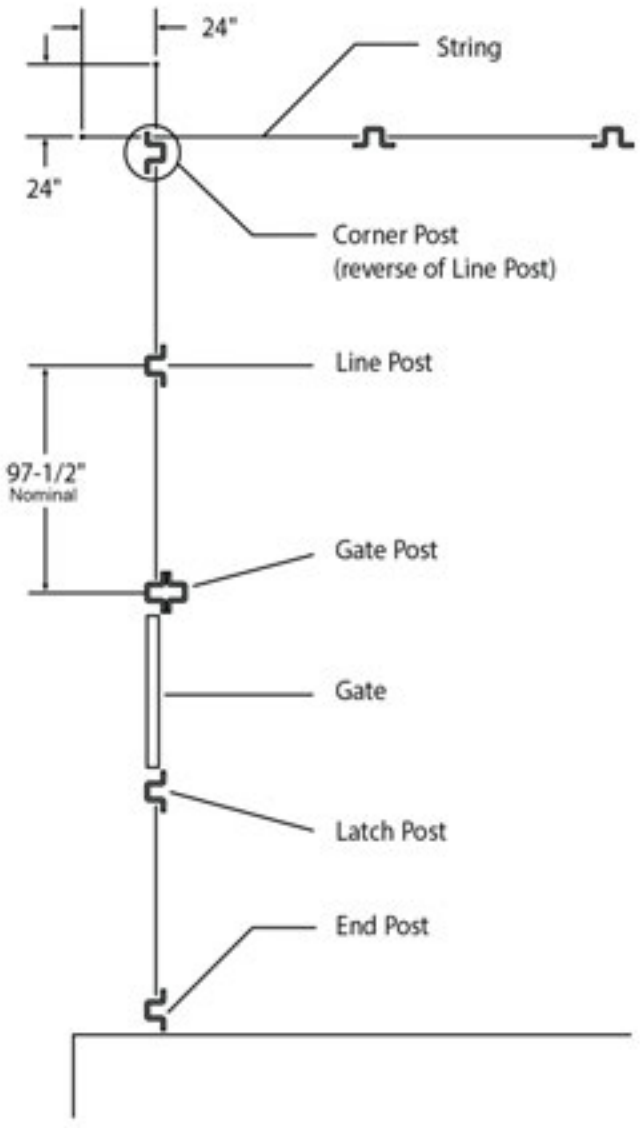
1. Before beginning installation, check to ensure that fence footings do not exceed legally established property lines, and that your fence will conform to local code specifications regarding frontage locations and allowable fence heights. Also, be sure to check with local utility companies including water, gas, electricity and sewage for the locations of underground cables or pipelines before digging. Precisely mark the fence layout. This is the critical first step on which a problem-free installation depends.

2. Measure the overall length of your planned fence and determine how many fence sections you will need, locating posts as laid out in the assembly diagram for the style selected. The precise spacing and location of each line and terminal post (terminal posts are corner, end, latch and gate posts) are specific to each style. To ensure the fence is evenly matched with the length of the layout, adjust shorter sections at the corners or near any gates or buildings.

3. Mark the location of each terminal post (Corner, End, and Gate Posts) with a stake.

   a. Mark the location of gates and use the gate information from the assembly diagram to assist you in marking the precise spacing and location of gate latch and gate posts.
   b. Determine the size of each gate in the fence, the gate swing direction (swing-out or swing-in) and the location of the latch and handle on the gate (left or right handed swing).

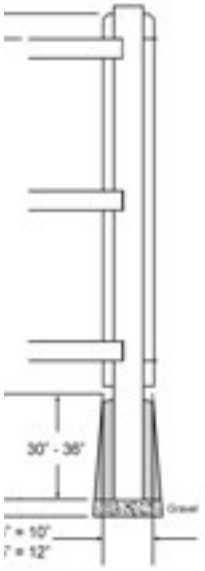
Note: Endwood boards and rails may be cut to accommodate shorter spans and terrain adjustments using a circular or chop saw with carbide blade (Minimun 100 teeth).



SECTION 2
INSTALLATION OF A POSTMASTER FENCE SYSTEM

STEP 1
Dig terminal post and line post holes approximately 10" in diameter and 30" deep, with sloping sides (Fig. A). The exact diameter and depth will be determined by local weather and soil conditions.

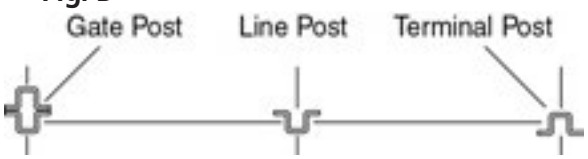
Fig. A



STEP 2
Typically, plan on positioning fence boards with their tops 4" above the top fence rail, leaving a 2" clearance between the fence board bottoms and the ground. Refer to guidelines for appropriate post positioning.

STEP 3
Position the terminal post in the hole. Center the post in the hole and ensure it is square with the fence line so the rails you attach to it will parallel the string line you'll install in STEP 5. Also ensure the post is plumb and set at the correct height. Block and support as necessary to preserve post position as installation continues. Surround post with concrete in a continuous pour. Trowel finish around post and slope downward to direct water away.

Fig. B



STEP 4.
Set gate posts by fastening two PostMaster segments back-to-back with four #12 x 1/2" gate post screws (Fig. C). Put one screw in each flange, 6" below the upper edge of the top rail. Put the remaining two screws in the flanges at points 6" above the base of the bottom rail. Place the assembled gate post in its hole, ensuring that its rail pockets will line up with rail pockets on adjacent line post when installed.

Fig. C

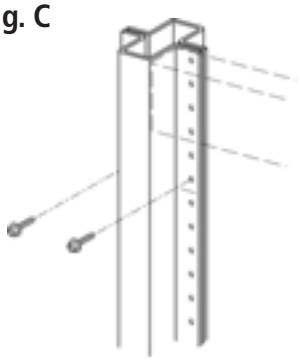
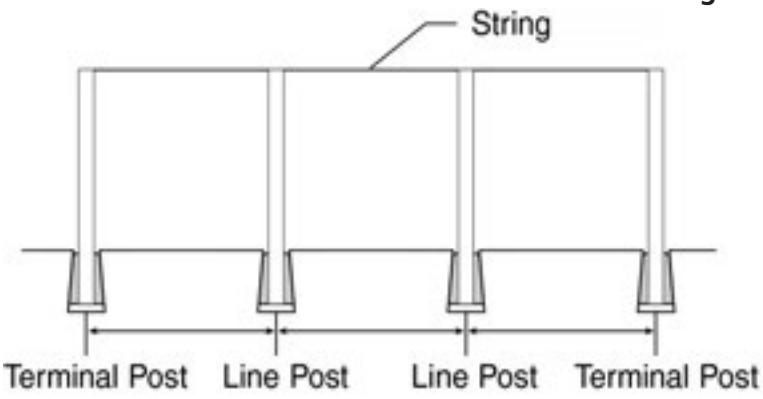


Fig. D

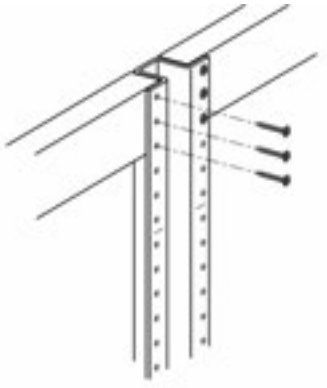
STEP 5 - Locate and Set Posts
When the terminal post footings have hardened enough to stabilize the posts, stretch a string line taut across the tops of the posts to mark the desired height of the line posts. Set all line posts as described in the preceding steps (Fig. D).



SECTION 3
INSTALL RAILS

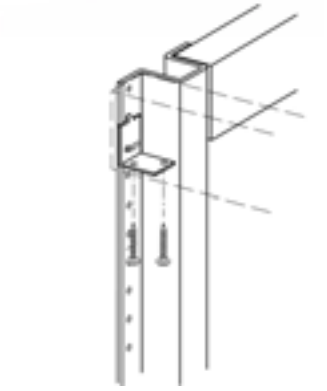
Once all posts are set, attach rails according to the selected fence style. Typical fence boards are positioned 2" above ground level and top rails installed 4" from the top of the boards. Bottom rails are attached 7" above the board bottom and middle rails centered between the top and bottom rails.

Fig. E



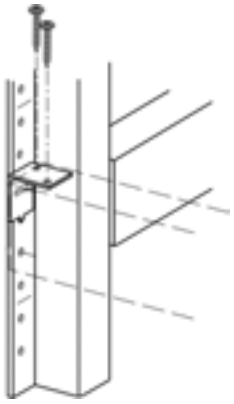
STEP 1
Determine where to attach rails. PostMaster posts have holes premeasured at 1" on center to make it easier to align rails at either end. For rail-adjustment references, use the debossed line up marks spaced 6" on center and starting 1/4" from the top of the post (Fig. E).

Fig. F



STEP 2
Fasten each rail-end using three #8 x 1-1/4" rail screws.
NOTE: If the ground slopes, be sure to cut both rail-ends diagonally to allow a flush fit against the post (Fig. F).

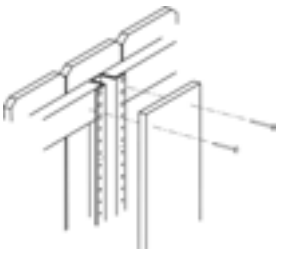
Fig. G



STEP 3
Attach rails to corner posts, using one postclip per rail-end that butts against the rail flange. Fasten the bottom edges of the top and middle rails to the postclip with two #8 x 1-1/4" rail screws. For the bottom rail, position postclip above rail so it can be screwed to the rail's top edge (Fig. G).

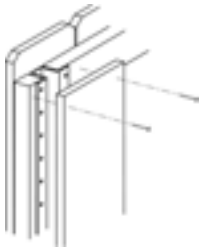
LINE POST COVER BOARD – 5-1/2"
STEP 1
Install 5-1/2" Postmaster cover boards after installing fence boards. Attach cover board by nailing into the rail on either side of the post (Fig. G).

Fig. G



END POST COVER BOARD
STEP 1
Fasten a 2" x 2" vertically in rail pocket by nailing it through fence board. Attach cover board by nailing one side into 2" x 2" and the other side into fence rail (Fig. H).

Fig. H



CORNER POST FACE BOARD – 5-1/2"
STEP 1
Line up edge of fence board with flange edge. Attach fence board by fastening five #8 x 1/2" cover screws into fence board through flange in rail pocket (Fig. I).

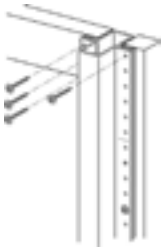
Fig. I

GATE POST COVER BOARD - SWING OUT GATE
Use the numbering system below to identify the gate post pocket positions referenced in the following steps.

Fig. J

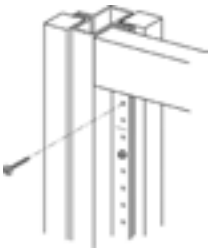
STEP 1
Attach a 2" x 2" in rail pocket #1 by fastening five #8 x 1-1/4" rail screws into it through flanges from rail pocket #3 (Fig. J & K).

Fig. K



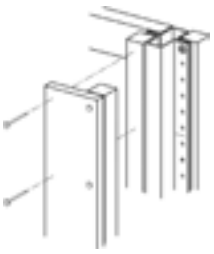
STEP 2
Diagonally attach a 2" x 2" in rail pocket #4 by fastening five #8 x 1-1/4" rail screws into it through flanges from rail pocket #2 (Fig. J & L).

Fig. L



STEP 3
Attach a 2" x 2" to a cover board. Install the cover board so the 2" x 2" fits into rail pocket #3, and fasten the assembly in place by nailing into the 2" x 2" in rail pocket #4 (Fig. J & M).

Fig. M



GATE POST COVER BOARD - SWING IN GATE

STEP 1
Attach a 2" x 2" in rail pocket #1 by fastening five #8 x 1-1/4" rail screws into it through flanges from rail pocket #3 (Fig. J & N).

STEP 2
Drill holes for hanger bolt in hat section between rail pockets #3 and #4 (Fig. J & O). The hanger bolt adjustment nuts will be installed against that section.

STEP 3
Cut a 2" x 2" to appropriate lengths for rail pocket #4. Attach by fastening #8 x 1-1/4" rail screws into the 2" x 2" through flanges in rail pocket #2 (Fig. J & O).

STEP 4
Cut a 2" x 2" to appropriate lengths for rail pocket #3 and nail to cover board. Install the assembly so 2" x 2" fits into rail pocket #3, and fasten by nailing through cover board into 2" x 2" in rail pocket #4 (Fig. J & P).

Fig. N

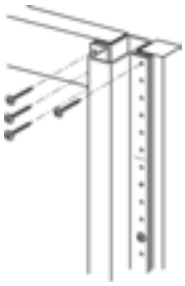


Fig. O

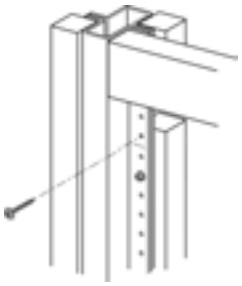
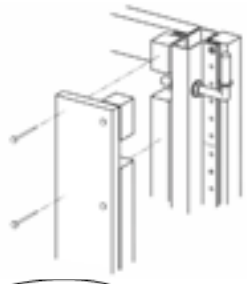
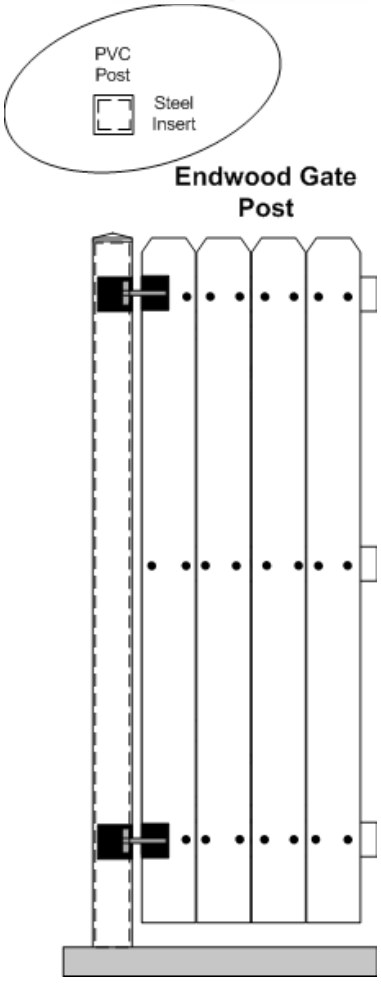


Fig. P



SECTION 5
INSTALL FENCE BOARDS

Fig. Q



STEP 1
Install all fence boards according to fence style, see assembly drawings pages 9 to 11. Use six (6) 4D x 1.5" or 1.75" ring shank nails per board (except for back row on board on board fence panel which requires three (3) 4D x 1.5" or 1.75" ring shank nails per board.

Note: There are several alternative Hinge & Latch Posts that may be used with PostMaster Fence System.

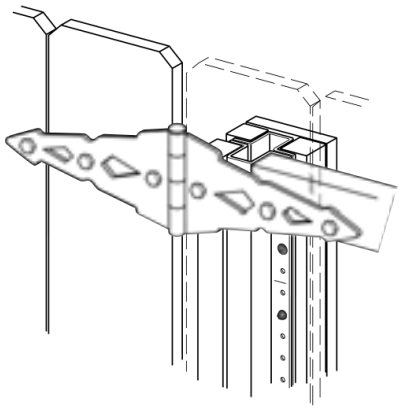
A. Endwood 4" Post Sleeve over wood or metal insert.
B. Powder-coated 4" Metal post with .250" wall.

Note: A an alternative to using the PostMaster Gate system is using the Endwood post sleeve over a metal insert.

- The Endwood gate hardware is not supported with the PostMaster gate post system.
- Install an Endwood post sleeve which is reinforced with the E-steel insert into Wet Cement.

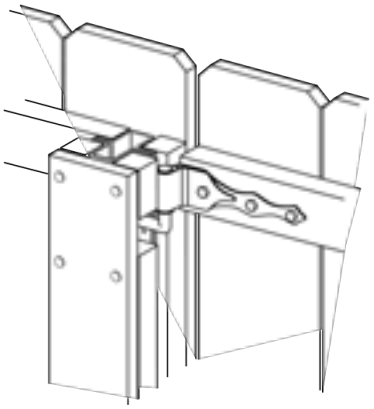
SWING-OUT GATE
OPTION 1
Use 8" ornamental strap hinge.
OPTION 2
Use 8" maxima strap hinge.

Fig. R



SWING-IN GATE
Use hanger bolt combined with 8" ornamental strap hinge.

Fig. S



Color Matched Touch Up Paint

Color matched touch up paint may be purchased from Home Depot by scanning a board or post cap for color matching. You may also use the following scan information below. However, keep in mind Home Depot calibration settings may vary from store to store.

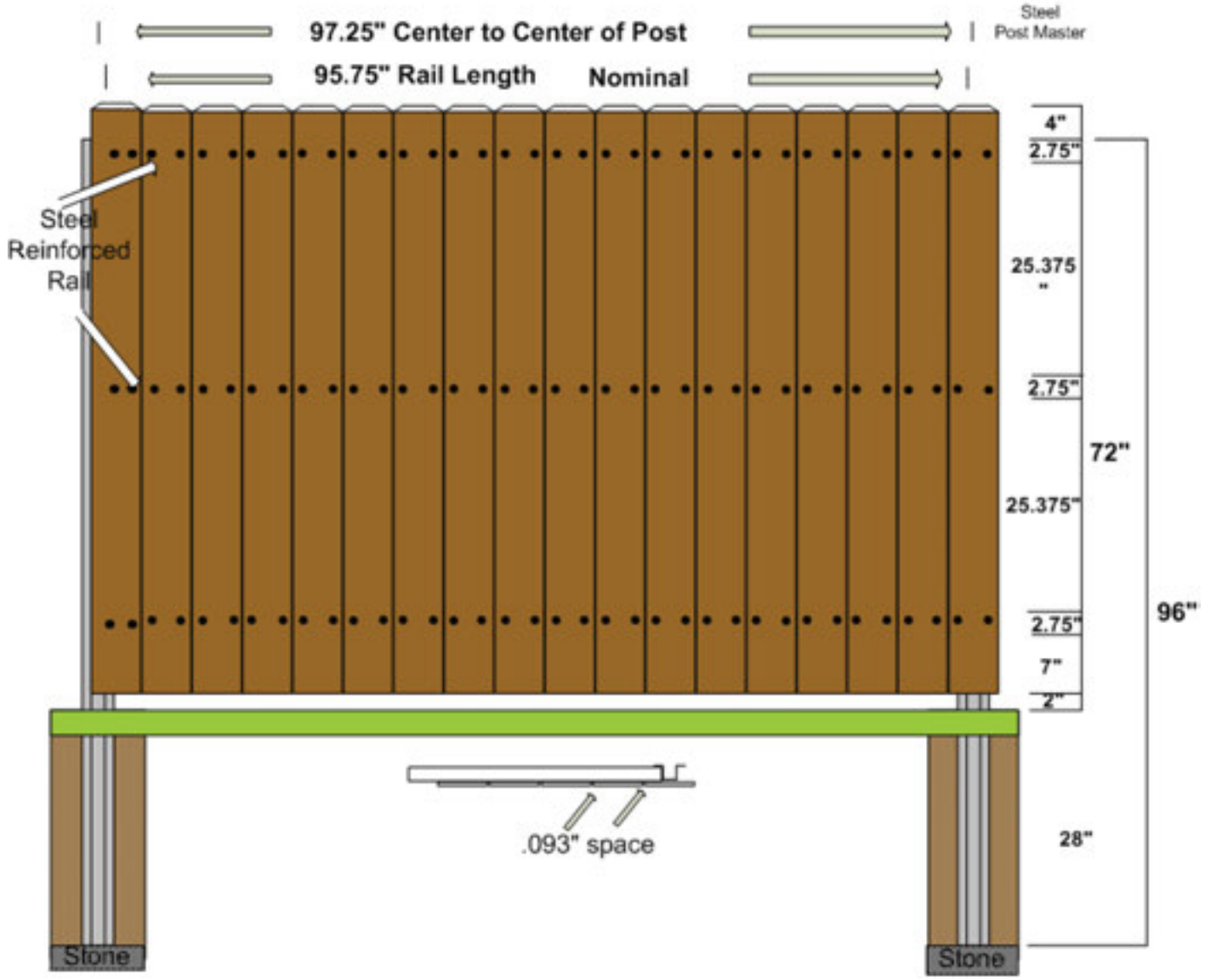
Fig. T

Sable

Slate

Sequoia

6'H x 8'W Privacy with PostMaster 1.75" x 2.75" Rails - Solid Board Dog Ear or Straight-Edge Boards

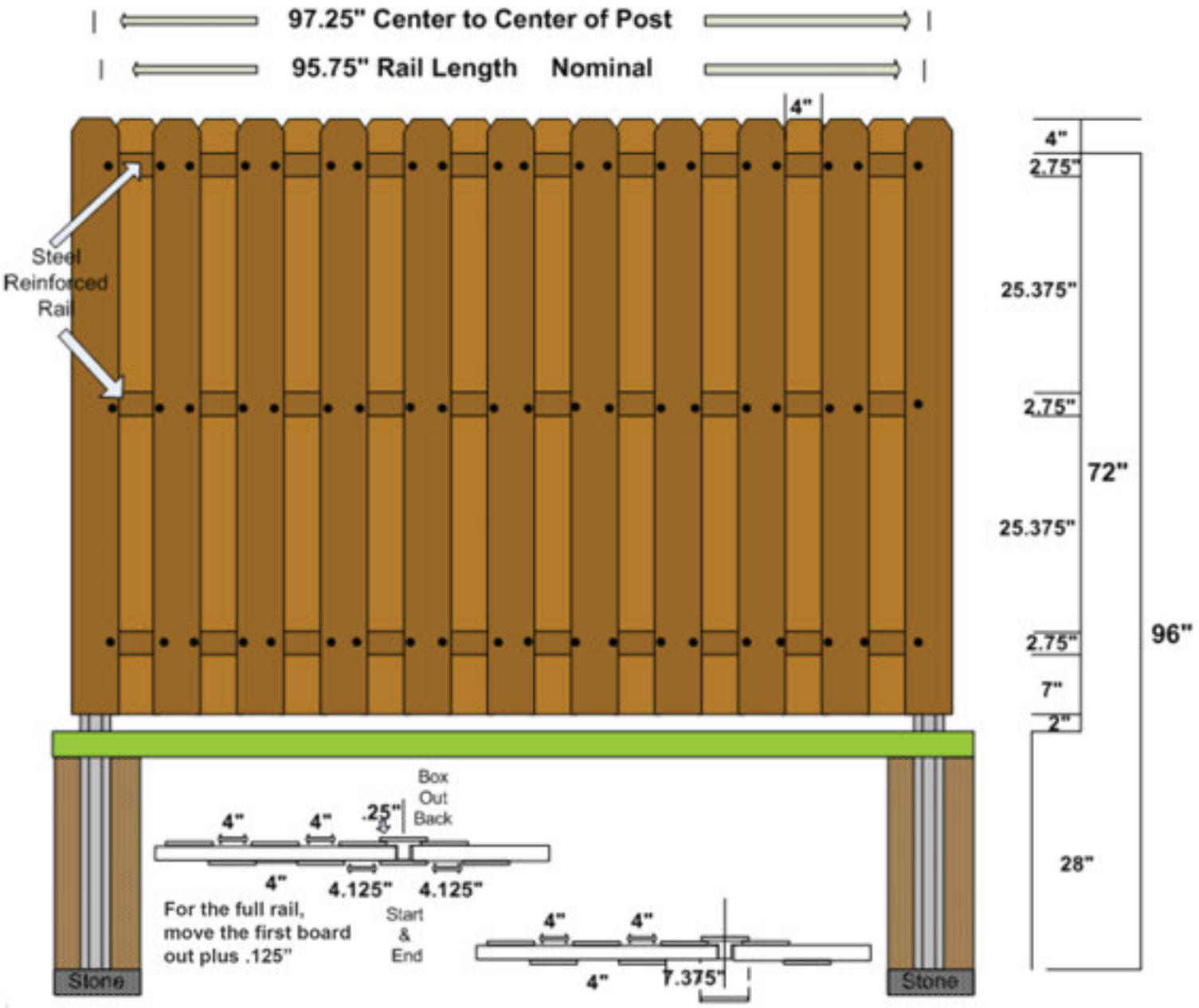


PostMaster Solid Board

On center to on center spacing: 97.25"
Post hole diameter: 10"
Post Height set above ground: 68"
Ground to top of board: 72"
Boards: 70"
Ground Space: 2"

Top Rail: Steel reinforced
Middle Rail: Steel reinforced
Lower Rail: Hollow
Top Rail Spacing: 4" from top of board
Bottom Rail Spacing: 7" from bottom of board

6'H x 8'W Privacy with PostMaster 1.75" x 2.75" Rails - Shadowbox Dog Ear or Straight-Edge Boards

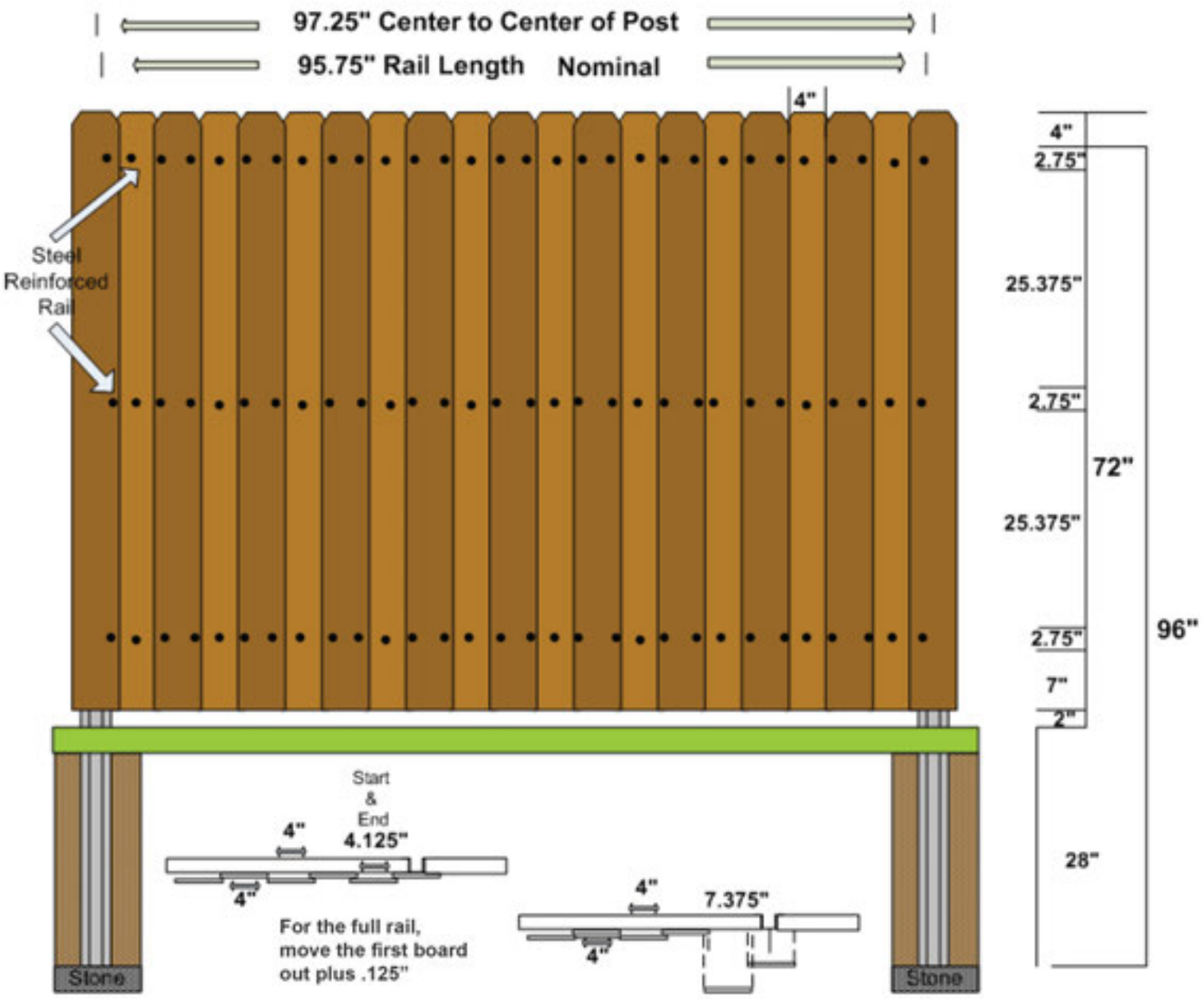


PostMaster Shadowbox

On center to on center spacing: 97.25"
Post hole diameter: 10"
Post Height set above ground: 68"
Ground to top of board: 72"
Boards: 70"
Ground Space: 2"

Top Rail: Steel reinforced
Middle Rail: Steel reinforced
Lower Rail: Hollow
Top Rail Spacing: 4" from top of board
Bottom Rail Spacing: 7" from bottom of board

6'H x 8'W Privacy with PostMaster 1.75" x 2.75" Rails - Board on Board Dog Ear or Straight-Edge Boards

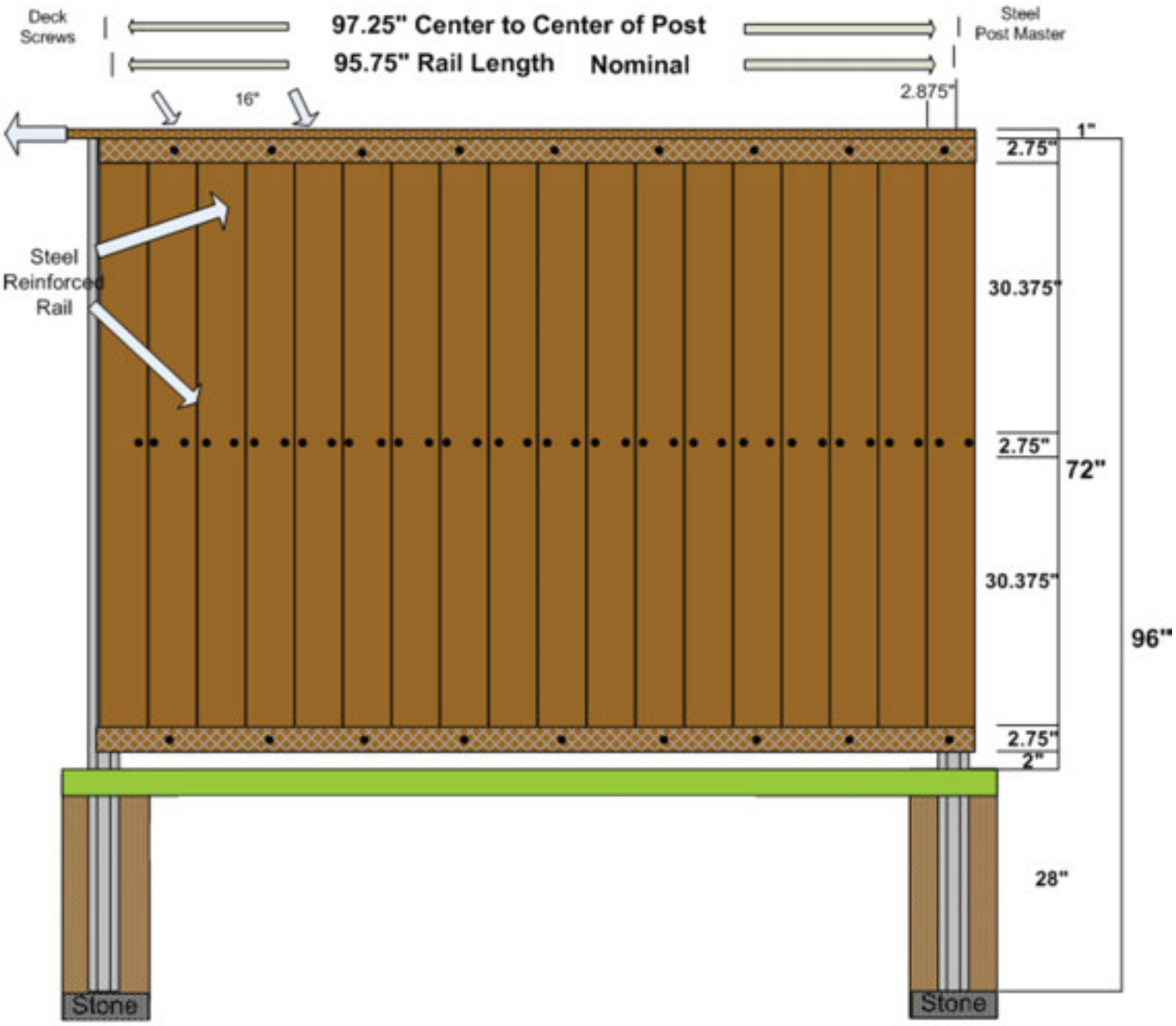


PostMaster Board on Board

On center to on center spacing: 97.25"
Post hole diameter: 10"
Post Height set above ground: 68"
Ground to top of board: 72"
Boards: 70"
Ground Space: 2"

Top Rail: Steel reinforced
Middle Rail: Steel reinforced
Lower Rail: Hollow
Top Rail Spacing: 4" from top of board
Bottom Rail Spacing: 7" from bottom of board

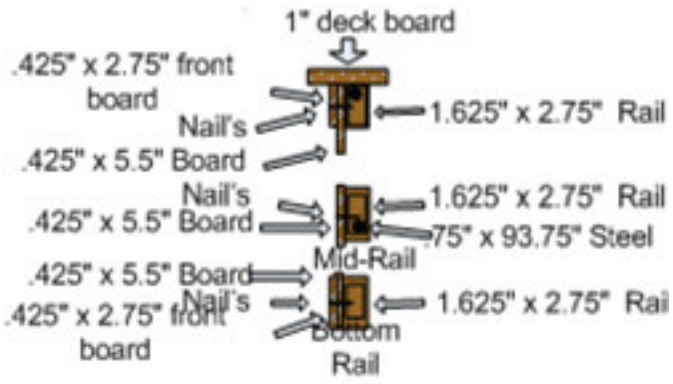
6'H x 8'W Privacy with PostMaster 1.75" x 2.75" Rails - California Straight-Edge Boards



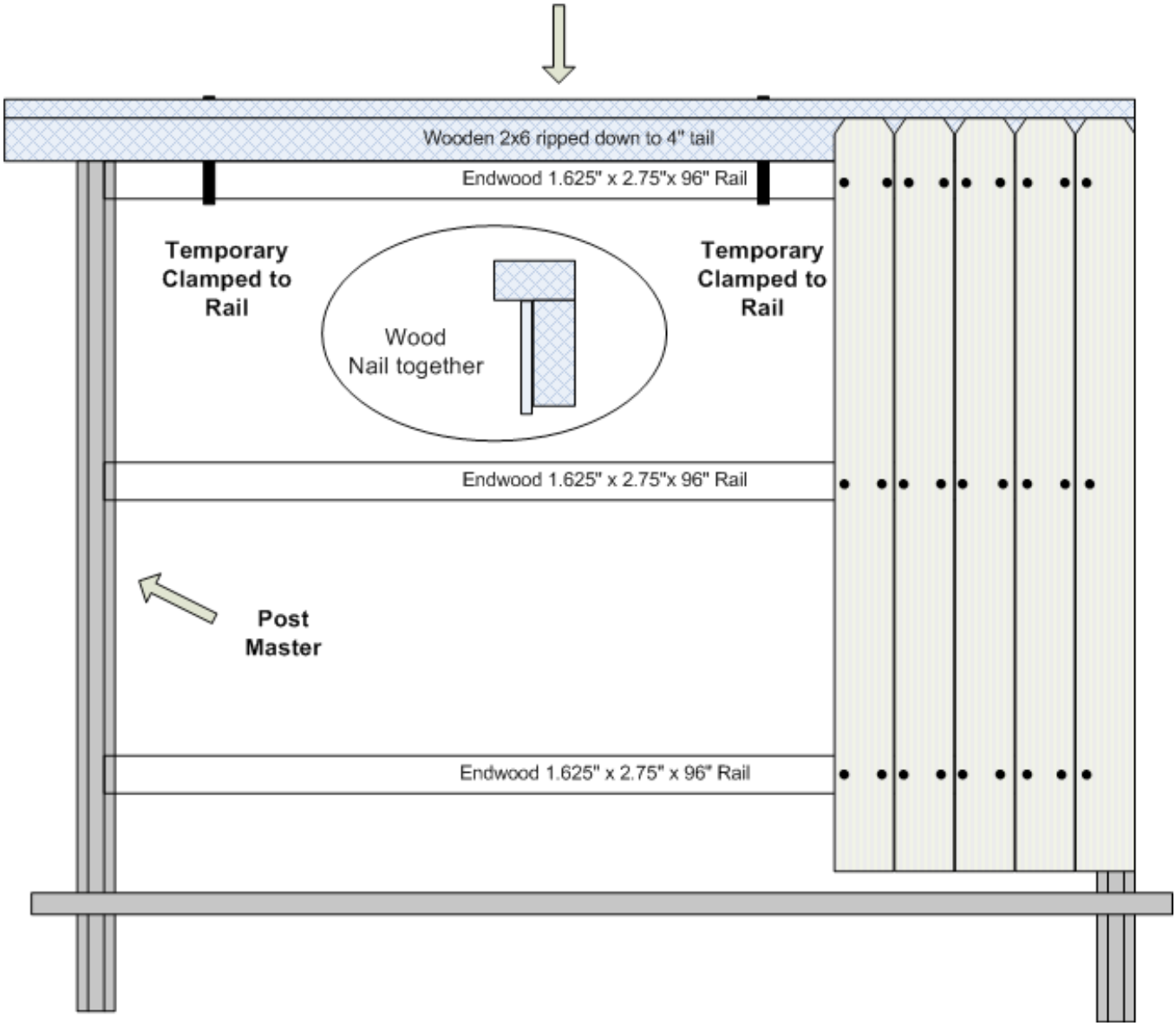
PostMaster California

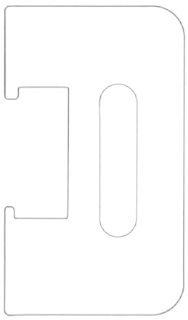
On center to on center spacing: 97.25"
Post hole diameter: 10"
Post height set above ground: 72"
Top Rail: Steel reinforced
Middle Rail: Steel reinforced
Lower Rail: Hollow
Top Rail Spacing: Flush with top of boards
Bottom Rail Spacing Flush wtih bottom of boards

Side view



Wooden 2" x 6" x 8' Jig
To Keep boards straight across the top





Board Spacing Jig - Used between boards in privacy fence styles. Spacer provides a .093" between boards. Double spacing is used in some fence styles to space the end boards adjacent to the post. See assembly drawings for details.

If using a steel L channel on the top rail as a guide, you may choose to file the board spacing jig adding an extra 1/8" to increase the opening to use over the top rail and L channel.

Angle Iron- 1.5" x 1.5" x 1/8" - 6 ft. long steel channel used to keep rails straight while installing boards. Caution - do not put your body weight on rails when installing boards. One per board crew. Available in most local homecenter or hardware stores.

Mini Quick Clamps - Used to clamp metal L-Channel to top rail. Available in most hardware stores.

Nail Pro-Pneumatic nail gun - Used with nail coils to drive nails through boards and rails. Available at Enduris.

SUREBONDER 9760 Hand Held Nail Gun - Used on individual nails not driven flush with board. Hold nail gun over nail, insert over head of nail, and drive nail to be flush with surface of fence panel. Available in most hardware stores.

Extra Tips

Storage of Boards - When installing an Endwood fence, it is important to keep fence components covered and out of direct exposure to the sunlight until ready to use.

Fence Layout - Measure the overall length of your planned fence and determine how many fence sections you will need – placing posts 8 feet apart will provide the most economical spacing. Fence runs will require adjustment of sections to ensure a perfect fit. A simple option is to make adjustments for shorter sections at the corners or near any gates or buildings. To balance the layout for a more customized look, make adjustments to several sections.

Leveling Boards - By placing a metal L-channel (available at most hardware stores) on top of the top rail, boards may be quickly installed for level.

Bow in Boards - Boards or rails that have been directly exposed to the sun while working may begin to bow. Remember to turn them over and let them set in the sun for a few minutes to straighten prior to installing. For slight bow in board, install boards with bow away from midrail.

Nailing Boards - When nailing boards, always start on one end of the fence panel, and begin nailing from the top, moving downward. Do not lean on rails when installing boards. Ensure nails go through the boards and into the center of each rail. Use six (6) 4D x 1.5" or 1.75" ring shank nails per board (except back row on board on board fence styles which use three (3), see assembly drawing for details).

Keeping Nails Flush - When using the pneumatic nail gun, nails that are not driven flush to the board may need to be driven in separately. To avoid denting the board material, a hand held nail gun may be used to drive the remaining nails to be flush with the fence panel. See page 14 for details.

Rail Distance - Endwood assembly drawings are provided to assist in suggested configurations. Custom configurations can easily be made to create any fence style and design keeping in mind that rails should never be greater than 30" apart.

Post Inserts for 5" x 5" Posts - A 4' Z bar galvanized steel insert or rebar and concrete should be used inside of 5" x 5" posts, up to the bottom of the first rail in every third post for greater stability.

Decorative Post Caps - When installing select decorative caps such as New England style, posts will need to be adjusted - raising them 1.5" higher, by lowering routing or bracket placement by 1.5".

Post Caps - Post caps are easily attached and snapped onto the post. A two part epoxy glue may be used to ensure a permanent hold by placing two pea size daubs of glue inside the post cap, and firmly placing it into place on top of the post. Glue excess may be quickly wiped off before it dries.