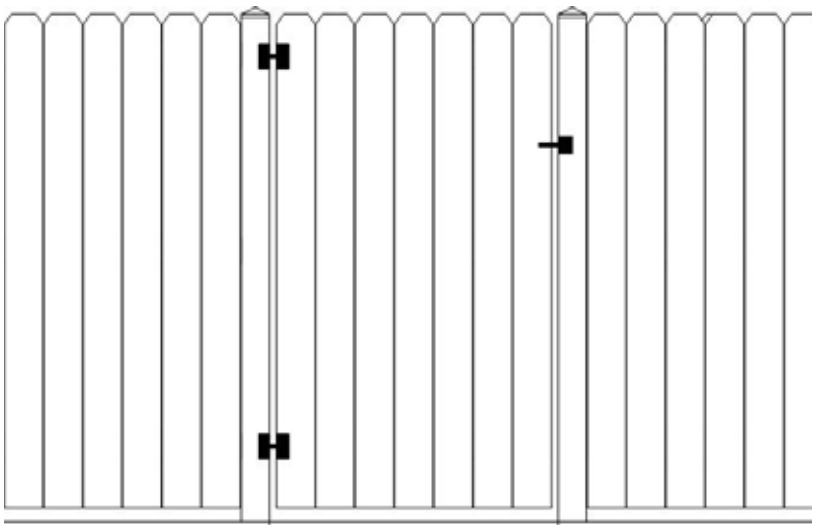
Endwood Fusion Welded Gate Installation Guide



ASSEMBLY AND INSTALLATION FOR:

Fusion Welded Gates

39", 45", and 50"

Gate Frame with Full Size Pickets

Gate width	Privacy & California # Pickets	Board on Board & Shadowbox # Pickets
39.06"	7	8
44.65"	8	9
50.24"	9	10

After preparing the fence layout, you will need to determine the number and position of your gates as well as gate size

DIG HOLES FOR GATE POSTS

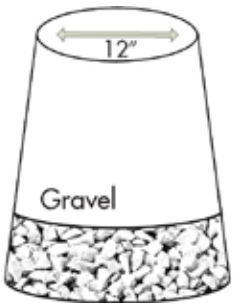


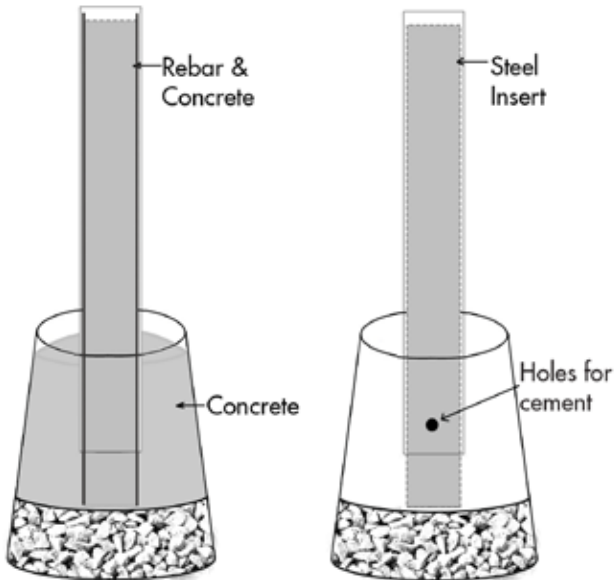
Fig. A

1. According to your prepared fence line, mark location for gate posts based on assembly drawing.
2. Dig gate post holes to be below the frost line. Hole size should be double post width (10"-12" in diameter) and at least 30" deep.
3. Fill hole with a 6" layer of stone to allow drainage. See Fig. A.
4. It is recommended to use rebar and concrete or steel inserts and self-tapping screws for gate posts.

SET & INSTALL GATE POSTS

1. Slide Endwood post over insert metal insert; if using metal use self tapping screws) paying attention to ensure sides are in alignment with fence line and post and insert are flush at top. Fasten a self-tapping screw and place several holes in the bottom of the post for wet set concrete to flow through. See Fig. B.
2. Install assembled gate post into the designated gate post hole.
3. Fill hole with wet concrete to 3" below ground level. Ensure post is plumb and the center line is aligned with fence.
4. Position Endwood post to correct height for gate level and match all fence posts.
5. Fill the remainder of the post hole with wet set concrete and allow to cure for 2-3 days before installation of Endwood gate.

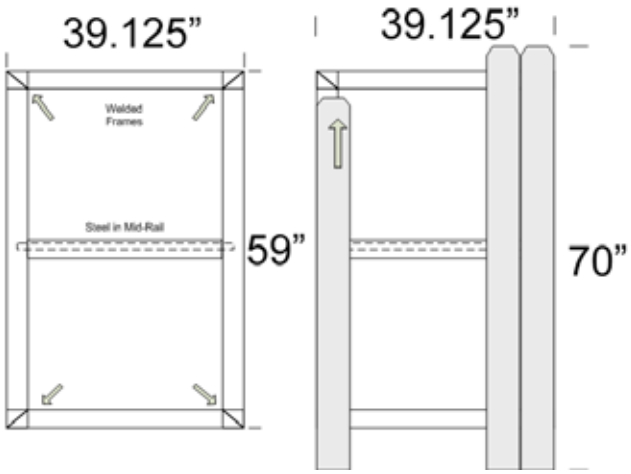
Fig. B



Note: All posts with steel inserts require several staggered 2.5" holes to ensure wet set concrete flows into posts.

Assemble Gate Frame

Fig. C



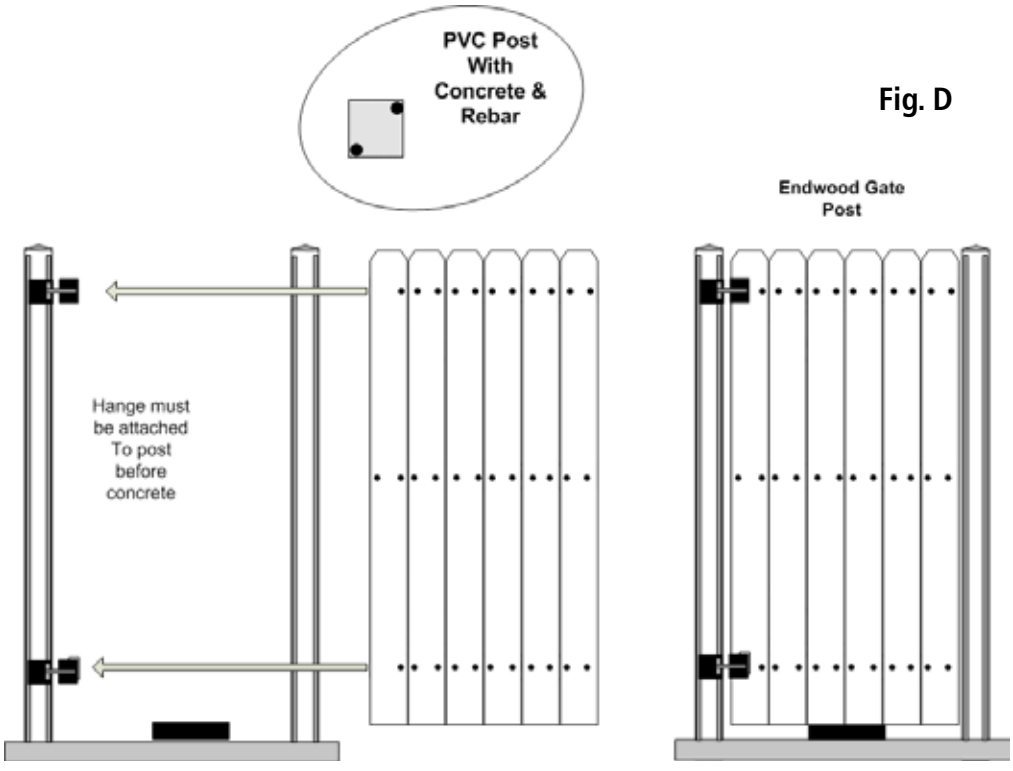
1. To begin assembly of the gate frame, lay frame on a flat surface - flush side down.
2. Install the first and last outer pickets flush with the edge of the gate frame. Place only three (3) nails through first and last outer pickets, nailing only the inside of picket.
3. Attach Endwood Pickets to frame and Endwood Rails. Position pickets vertically to match fence, typically 4” overhang above top rail. See Fig. E. Leave an approximately .093” gap between each picket. Use spacer for consistent spacing.
4. We recommend using 4D x 1-1/2” or 1-3/4” ringshank nails, nailing the pickets, starting from the top rail moving down towards the bottom rail. Place two (2) nails into the center of each rail. Six (6) nails per picket (except outer pickets at edges of gate frame).

IMPORTANT: Nails must go through the Endwood picket and into the center of the Endwood rail.

INSTALL GATE – Using Rebar and Concrete in Posts - Fig. D.

1. Inside width between posts must be at least 1.5” wider than the width of the gate.
2. Determine gate side opening and swing direction before attaching hinges.
3. Use screws provided; attach the hinges to the gate posts. We recommend lining up hinges to match up to gate rails when attached.
4. Place rebar into two opposing corners of the posts, rebar should extend from the bottom to the top of the post, then pour wet set concrete into post holes and inside post, to the top of the posts.
5. Gate posts must set at least 48 hours prior to attaching the gate. Double check to ensure post is plumb and well aligned.
6. Level your temporary block to match the bottom of the fence line, between the gate posts. Set gate on blocks, level with the ground and at the correct height to match the fence line.
7. Attach the adjustable sides of the hinges to the gate. Always try to align the hinges in-line with the rails while keeping gate flush with fence top and bottom.
8. The heavy duty SS Endwood recommended hinges are adjustable for fine tuning gate fit and precision. Adjust hinges to ensure gate has equal spacing between posts on each side.

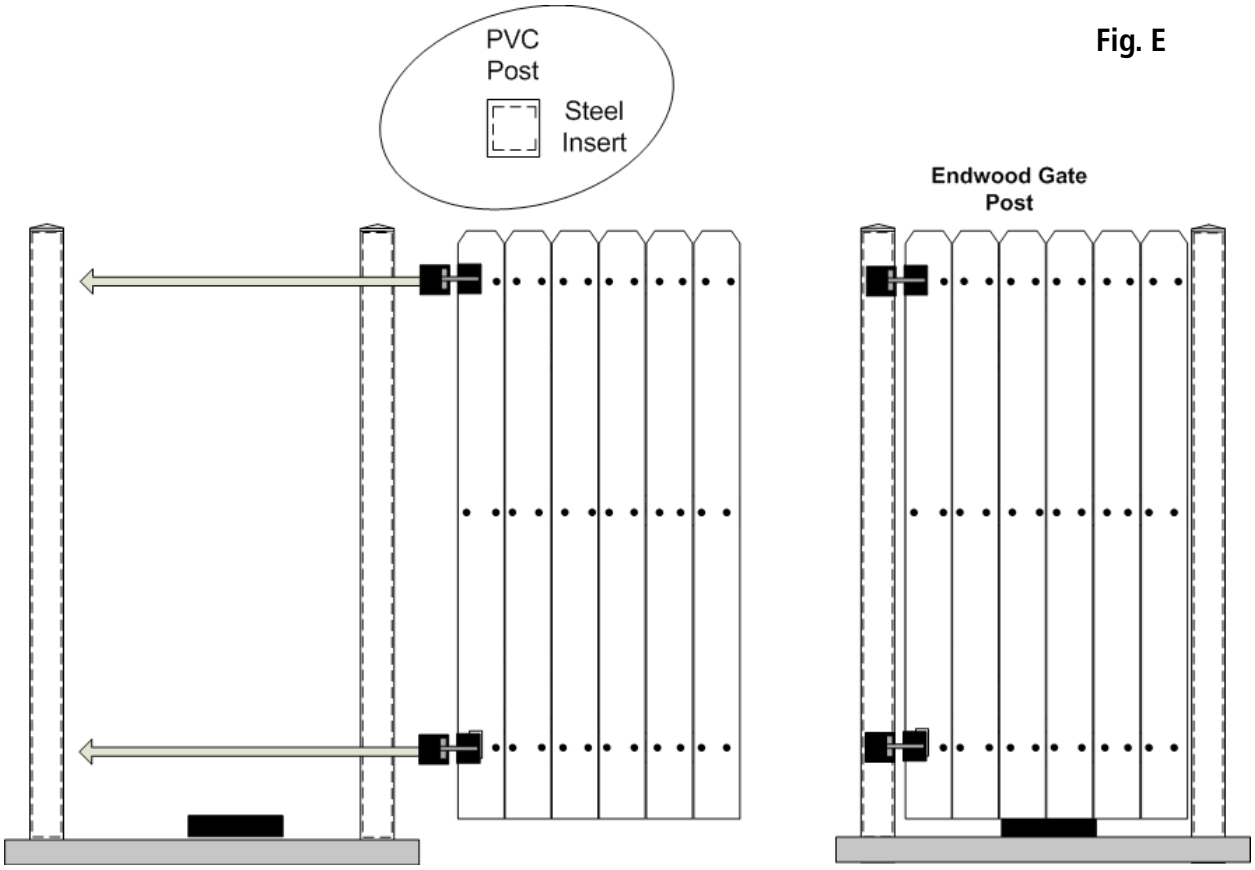
Fig. D



INSTALL GATE – Using 5" x 5" Steel Insert - Fig. E

1. Gate posts must set at least 48 hours prior to attaching the gate. Double check to ensure post is plumb and well aligned.
2. Determine gate side opening and swing direction before attaching hinges.
3. Attach the adjustable sides of the hinges to the gate - again check to ensure swing direction. Always try to align the hinges in-line with the rails.
4. Set gate on blocks level with the ground and at the correct height to match the fence line. Inside width between posts must be at least 1.5" wider than the width of the gate. The heavy duty SS Endwood recommended hinges are adjustable for fine tuning gate fit and precision.
5. Level your temporary block to match the bottom of the fence line, between the gate posts and set the gate with attached hinges inside the gate opening.
6. Use screws provided; attach the hinges to the gate post.
7. Adjust hinges to ensure gate has equal spacing between posts on each side.

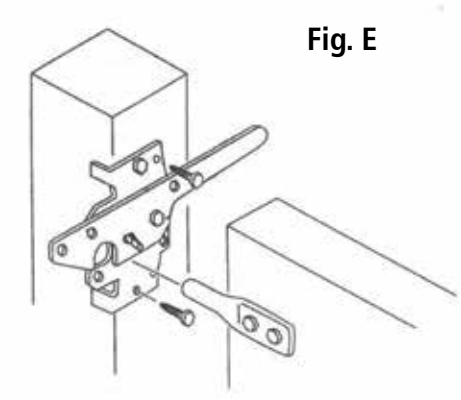
Fig. E



Attach Latch

Fig. E

1. Install striker with 1" black self-tapping screws into gate frame.
2. Line up latch with striker. Attach latch to post using 1-1/2" black self-tapping screws. See Fig. E for an example of one type of latch that may be used.



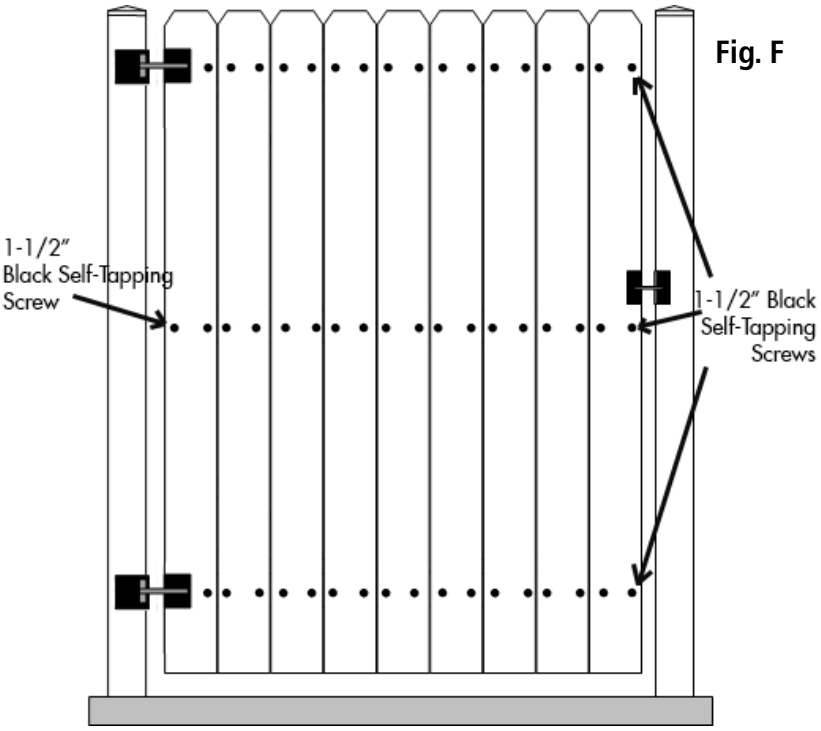


Fig. F

Attach Final Outer Picket Screws

1. Outer pickets should be fastened with 1-1/2"Black Self Tapping screws after placement of hinges and latch as shown in Fig. F.

Install Post Caps

1. Apply a small amount of PVC glue (two part epoxy found in most local hardware stores) to the inside of all four sides of the cap and press cap completely onto the top of the post and hold for a few seconds. Be sure to only apply a small amount, just a little dab on each side is sufficient for a firm hold. See Fig. F.

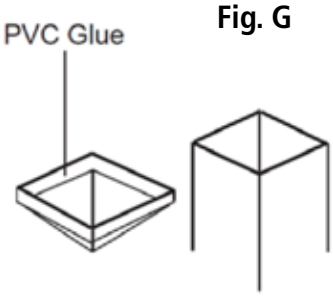
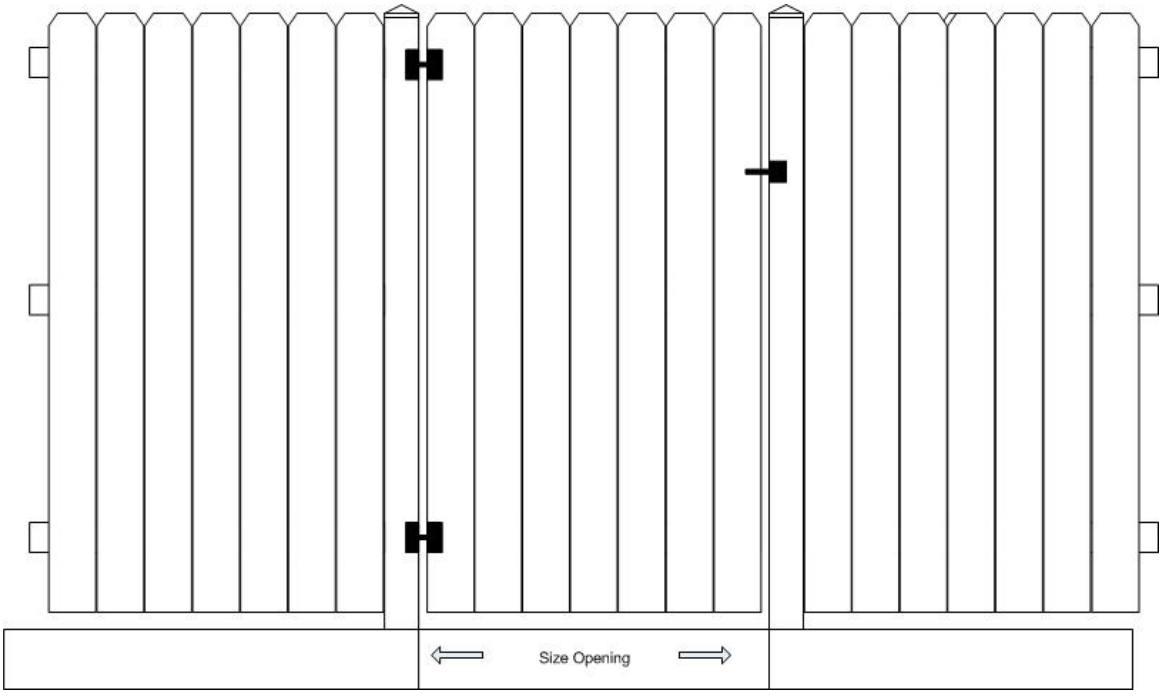


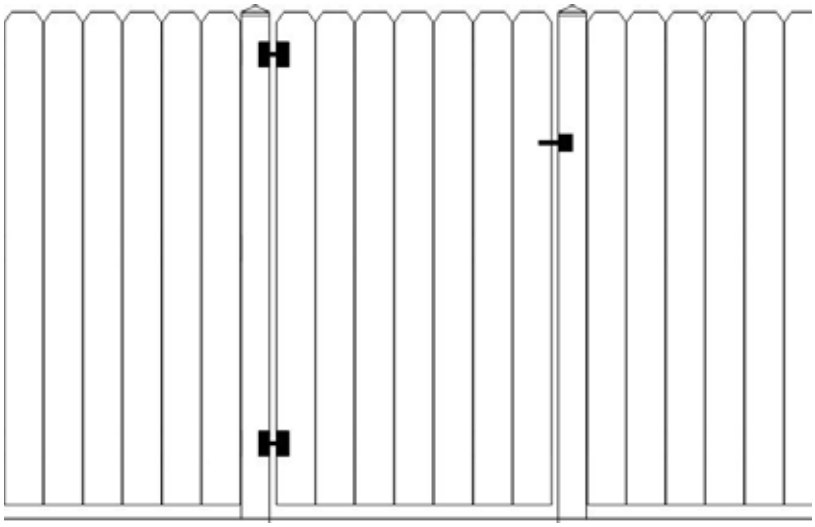
Fig. G



Endwood Adjustable Gate Installation Guide

Adjustable Gate Kit Includes:

Vertical Frame Sides (2)
Expander Bars (2)
Post Hinge (2)
Latch Kit (1)
Truss Cable (1)
Rail Spacers (6)
1-1/2" Black Self-Tapping Screws (16)
1" Black Self-Tapping Screws (20)
3" Wood Screws (6)
1" Wood Screws (24)
Gate Frame Caps (2)



After preparing the fence layout, you will need to determine the number and position of your gates as well as gate size

DIG HOLES FOR GATE POSTS

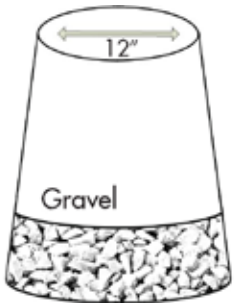


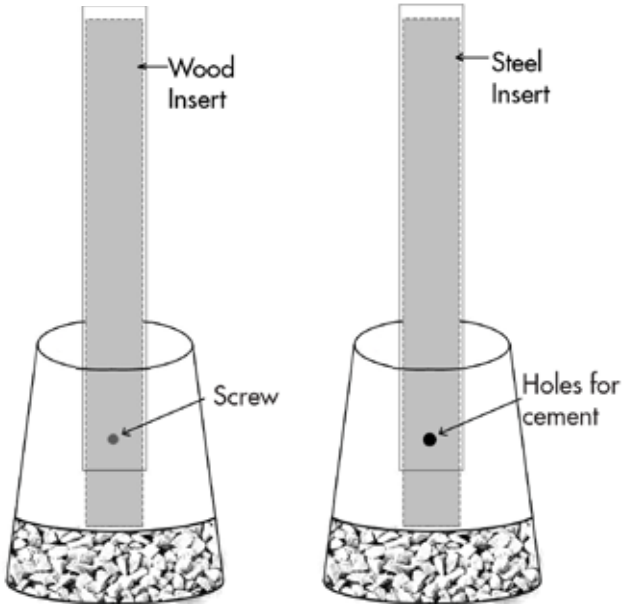
Fig. A

1. According to your prepared fence line, mark location for gate posts based on assembly drawing.
2. Dig gate post holes to be below the frost line. Hole size should be double post width (10"-12" in diameter) and at least 30" deep.
3. Fill hole with a 6" layer of stone to allow drainage. See Fig. A.
4. It is recommended to use wood or steel inserts and self-tapping screws for gate posts.

SET & INSTALL GATE POSTS

1. Slide Endwood post over insert (wood or metal, if using metal use self tapping screws) paying attention to ensure sides are in alignment with fence line and post and insert are flush at top. Fasten a screw at 2" below grade to secure post to wood insert or if using a metal insert, use a self-tapping screw and place several holes in the bottom of the post for cement to flow through. See Fig. B.
2. Install assembled gate post into the designated gate post hole.
3. Fill hole with wet concrete to 3" below ground level. Ensure post is plumb and the center line is aligned with fence.
4. Position Endwood post to correct height for gate, be level and match all fence posts.
5. Fill the remainder of the post hole with concrete and allow to cure for 2-3 days before installation of Endwood gate.

Fig. B



Note: All posts with steel inserts require several staggered 2.5" holes to ensure cement flows into post.

Assemble Adjustable Gate Frame

Fig. C

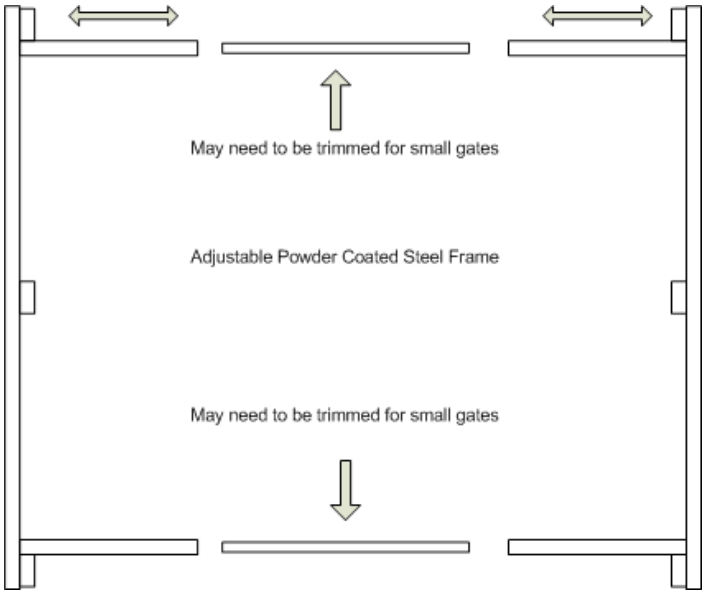
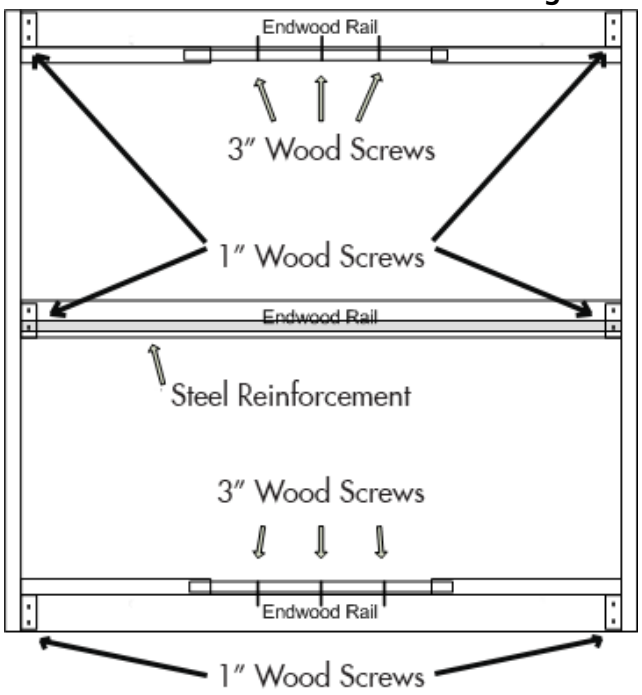


Fig. D



Assemble Gate Frame

1. Endwood's versatile adjustable gate frame may be used for Gate openings from 33″ to 72″ wide.
2. To begin assembly of the gate frame, lay frame on a flat surface - flush side down.
3. Insert expander bar into the side slip members (ensure holes face up and down - not side to side) in top and bottom rail and adjust as needed for gate size. See Fig. C.

Fig. E

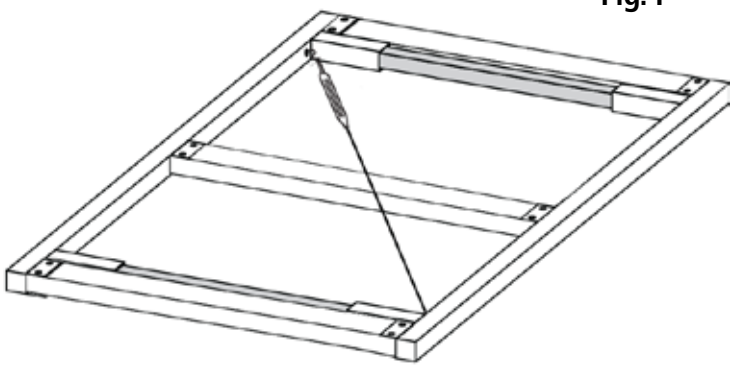
Gate Frame with Full Size Pickets

Gate width	Rail Length	# Pickets
33.47″	30.34″	6
39.06″	35.93″	7
44.65″	41.52″	8
50.24″	47.11″	9
55.84″	52.71″	10
61.43″	58.31″	11
67.02″	63.90″	12

Insert Endwood Rails

1. Trim Endwood rails as required for insertion into brackets. Rails are to be 3-1/8″ shorter than finished gate frame. See Fig. E Chart.
2. If using the smaller Endwood 2-5/8″ rail, place metal spacer between the bracket and rail prior to fastening screws through bracket, insert, and rail.
3. Attach slip members to top and bottom rail with 3″ wood screws. See Fig. D.

Fig. F

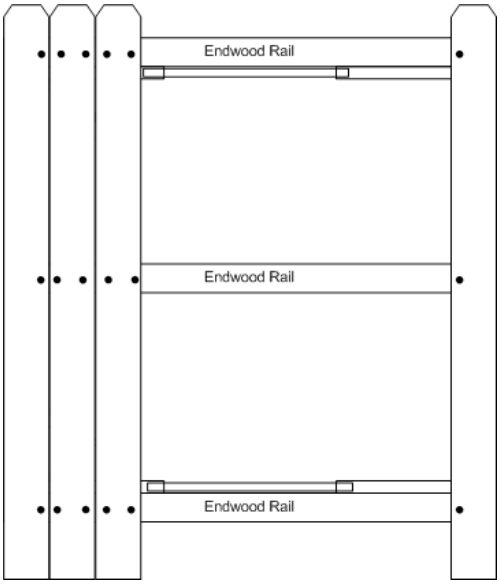


Install Truss Cable

1. Loosen turnbuckle screw. Install the "S" Hook for the truss cable into the hole at the top of the gate on the hinge side.
2. Install the truss cable by hooking the turnbuckle into the hole at the bottom of the gate on the latch side.
3. Adjust turnbuckle to light tension. See Fig. F. Measuring diagonally on both sides, check for squareness.

Fasten Pickets onto Gate Frame

Fig. G

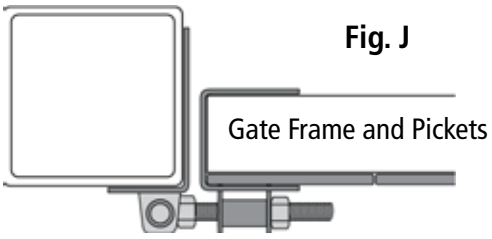


1. Flip the gate over.
2. Install the first and last pickets flush with the edge of the frame. Place only three (3) nails through first and last pickets, nailing only the inside of picket. See Fig. G.
3. Attach Endwood Pickets to frame and Endwood Rails. Position pickets vertically to match fence, typically 4" overhang above top rail. See Fig. G. Leave an approximately .093" gap between each picket. Use spacer for consistent spacing.
4. We recommend using 4d x 1-1/2" or 1-3/4" ringshank nails, nailing the pickets, starting from the top rail moving down towards the bottom rail. Place two (2) nails per rail. Six (6) nails per picket. **IMPORTANT:** Nails must go through the Endwood picket and into the Endwood rail.

Attach Hinges onto Gate Frame

1. Position U-shaped portion of hinges around picket and gate frame (see Fig. H) next to metal crossbars. Bolts can be placed on the inside or outside of the gate. Attach hinges to gate with 1" black self-tapping screws. Screws must attach to the metal frame through pickets.
2. Attach the outer edge of the picket on the hinge side between the hinges with a 1-1/2" black self-tapping screw. Attach latch side picket outer edge to the frame with three (3) 1-1/2" black self-tapping screws as shown in Fig. I. **NOTE:** Color matched touch-up paint is available at home depot, see Fig. M on page 38. Stainless steel flat head screws may be used instead (not included).
3. Set gate on blocks level with the ground and at the correct height to match the fence. Allow 1" on either side of the gate opening. Attach lower hinge to gate with 1-1/2" black self-tapping screws. Set bolt into hinge. Position upper hinge in bolt and attach to post with 1-1/2" black self-tapping screws.
4. Attach post hinge using 1-1/2" black self-tapping screws. Take adjustement bolt and slide into hinge barrel opening. Top hinge adjuster bolt will point up, bottom will point down, as shown in Fig. H. Place 2 screws into face of both top and bottom hinges, remove blocks, swing gate open, and place remaining 1-1/2" black self-tapping screws into post hinge bracket

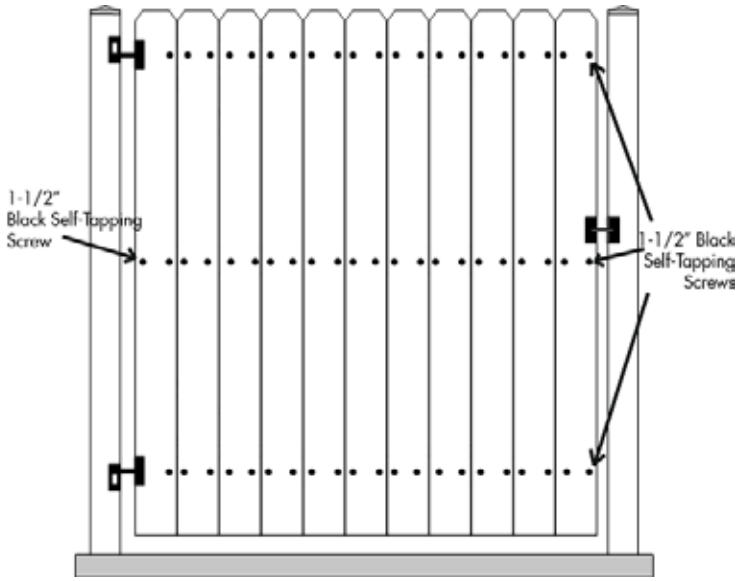
Fig. J



Note: The upper bolt points up and the lower bolt points down. Pre-drill with 9/64" drill bit for easier installation of drill point screws.

Fig. H

Fig. I



Attach Latch

1. Install striker with 1" black self-tapping screws into gate frame. See Fig. I.
2. Line up latch with striker. Attach latch to post using 1-1/2" black self-tapping screws. See Fig. K.

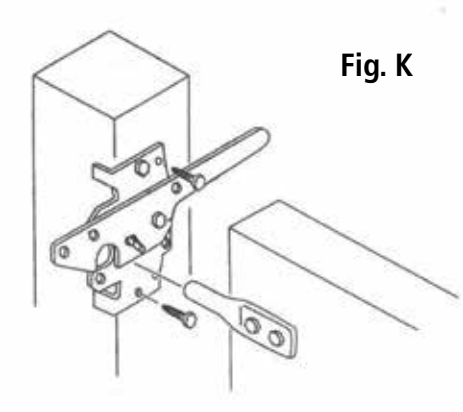


Fig. K

Install Post Caps

1. Apply a small amount of PVC glue (two part epoxy found in most local hardware stores) to the inside of all four sides of the cap and press cap completely onto the top of the post and hold for a few seconds. Be sure to only apply a small amount, just a little dab on each side is sufficient for a firm hold. See Fig. L.

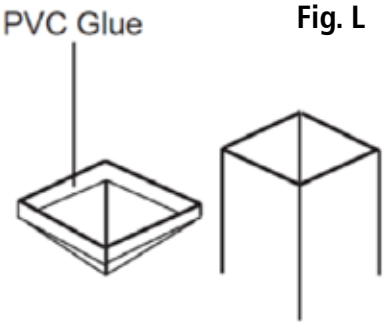


Fig. L

Install Gate Frame Caps

1. Insert gate frame caps by inserting caps into top of metal gate frame and pressing firmly to secure into place.

Color Matched Touch Up Paint

Color matched touch up paint may be purchased from home depot using the following information:

Fig. M

Sable

Slate

Sequoia