



# BUFFTECH® AND SIMTEK® FENCING INSTRUCTIONS

## Installation Instructions

English.....1



Read all instructions prior to installing product.  
Refer to manufacturers safety instructions when operating any tools.

To register your product, please visit: [barretteoutdoorliving.com](http://barretteoutdoorliving.com)

**⚠ WARNING:**

- Improper installation of this product can result in personal injury. Always wear safety goggles when cutting, drilling and assembling the product.
- Incorrect installation may cause harm to the product or individual.
- Check local building codes to determine pool-safe fencing options.

**NOTICE:**

- DO NOT attempt to assemble the kit if parts are missing or damaged.
- DO NOT return the product to the store. For assistance or replacement parts call: 1-800-336-2383.

**BEFORE YOU BEGIN:**

Check your local zoning laws.

- Local zoning laws and Home Owners Associations may regulate the location, style and height of your fence or even require a permit signoff beforehand.
- Check local codes for frost line depth and regulations.
- Additional products and assembly may be required to meet wind code requirements. Notice of acceptance (NOA) can be found at [www.miamidade.gov/building/pc-search\\_app.asp](http://www.miamidade.gov/building/pc-search_app.asp)

Contact your local utilities companies.

- You must have the utility companies clearly mark your property for electrical, gas or water lines to avoid puncturing any unseen underground utilities.

**TOOLS NEEDED:**

**GETTING STARTED:**

Site plans and permits
Measuring tape
Hammer or mallet
Wooden stakes
String line
Spray Paint for hole centers for post and gate spacing
Wooden spacer bar for post and gate spacing
Level
Concrete

**DIGGING HOLES:**

Shovel
Post hole digger
10" auger for 4x4 posts
12" auger for 5x5 posts

**FILLING EXTRUDED POSTS:**

Rubber mallet to tamp post
Funnel for filling post
Ladder for high fences

**INSTALLING POSTS:**

Wheelbarrow
Concrete mixing tools
Short length of wood, 2x4 for tamping concrete
Garden hose
Level

**CLEANING UP:**

Abrasive-type pad
Bucket and sponge

**ASSEMBLING FENCE/GATES:**

Drop cloth
Hacksaw, circular saw or chop saw with masonry blade
Square
#3 square drive bit
Phillips #2 screwdriver
Drill and drill bits
- 1/8" for #8 screws
- 1/4" for bullet clips and drain holes
- 11/64" for gate assembly
- 5/32" for gate hardware if using aluminum insert
- 3/8" for lock rings
- 1/2" deep socket (or nut driver) for traditional picket
- 3/8" nut-driver - Molded

**INSTALLING BOTTOM RAIL:**

Leveling blocks
Shim stock
Duct tape to seal rail ends

**INSTALLING ON CONCRETE:**

1/2" masonry drill
Core drill

**INSTALLING EXTRUDED GATES:**

Wrench, 7/16" for hinge nuts
Flat screwdriver to activate hinge spring

**EZ SET BRACKETS:**

7/16" wrench
Post routing - Extruded
Template kit with router
Spiral saw

**INSTALLING MOLDED GATES:**

7/32" Allen wrench
3/8" nut-driver

To obtain and review a copy of the warranty please visit [barretteoutdoorliving.com](http://barretteoutdoorliving.com). You may also contact us at 1-800-336-2383 or email [bufftech.com](mailto:bufftech.com).

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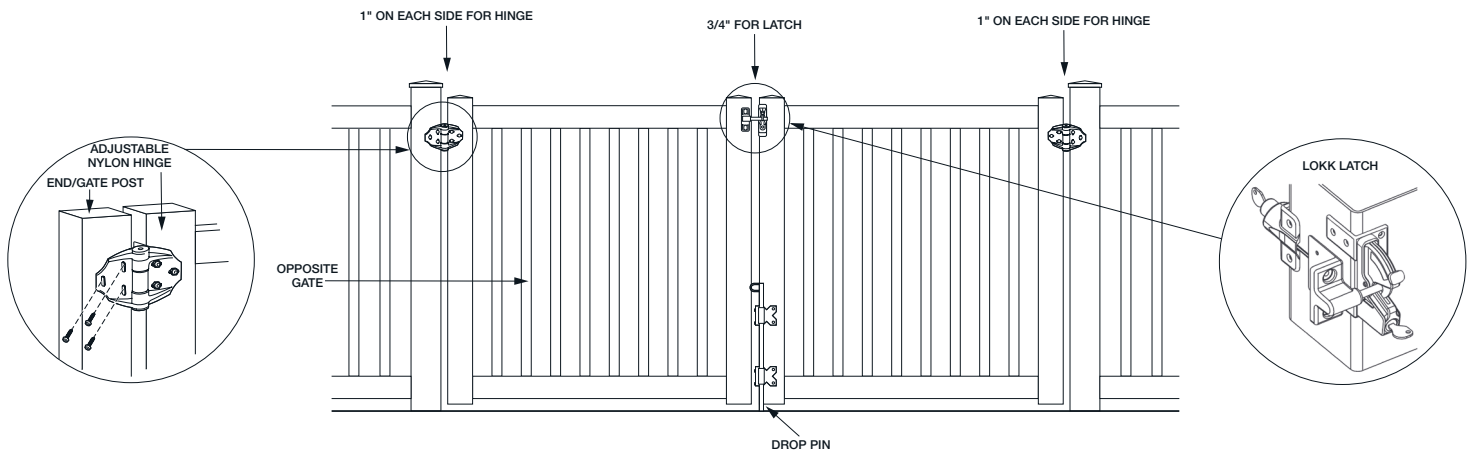
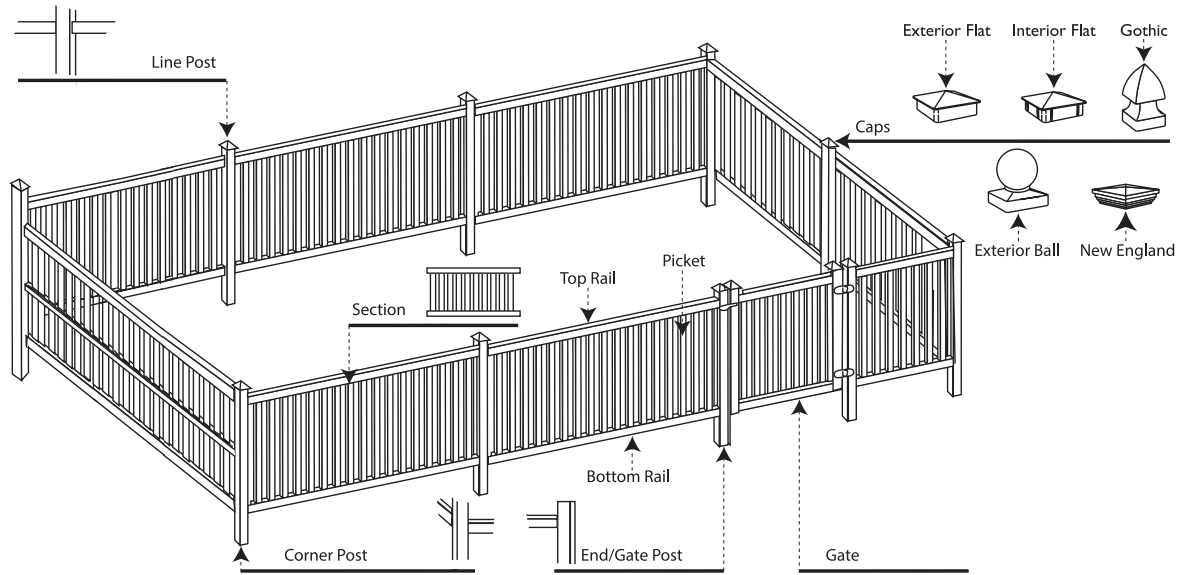
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## Installation

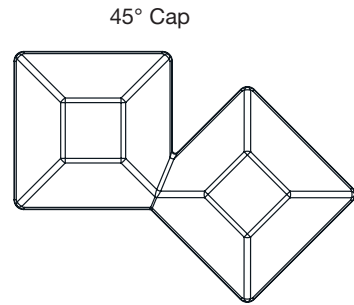
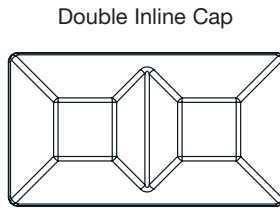
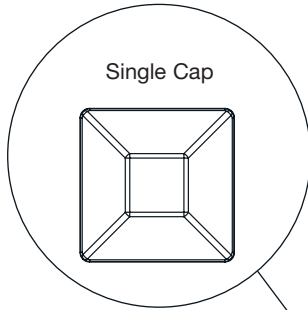
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# Fence System Components - Extruded



# Fence System Components - Molded

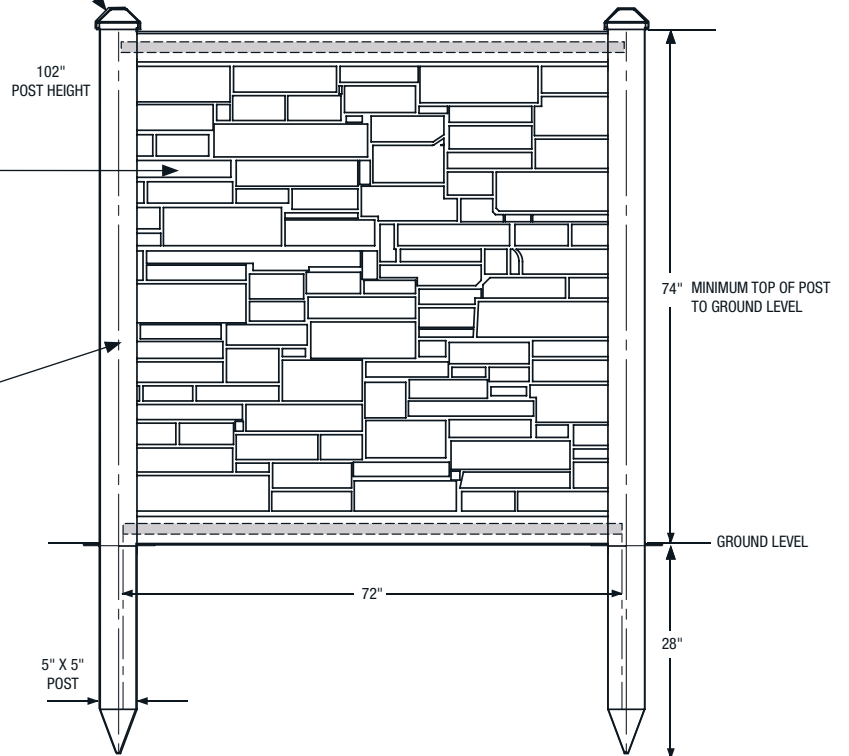
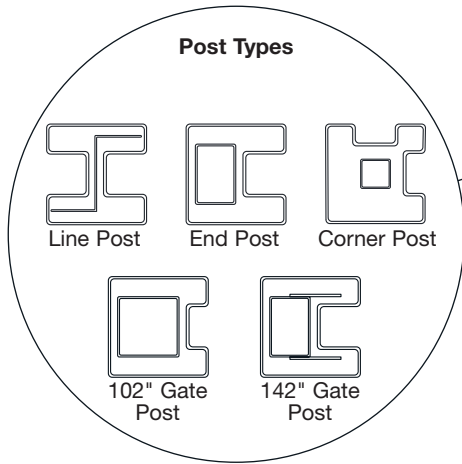
## Caps



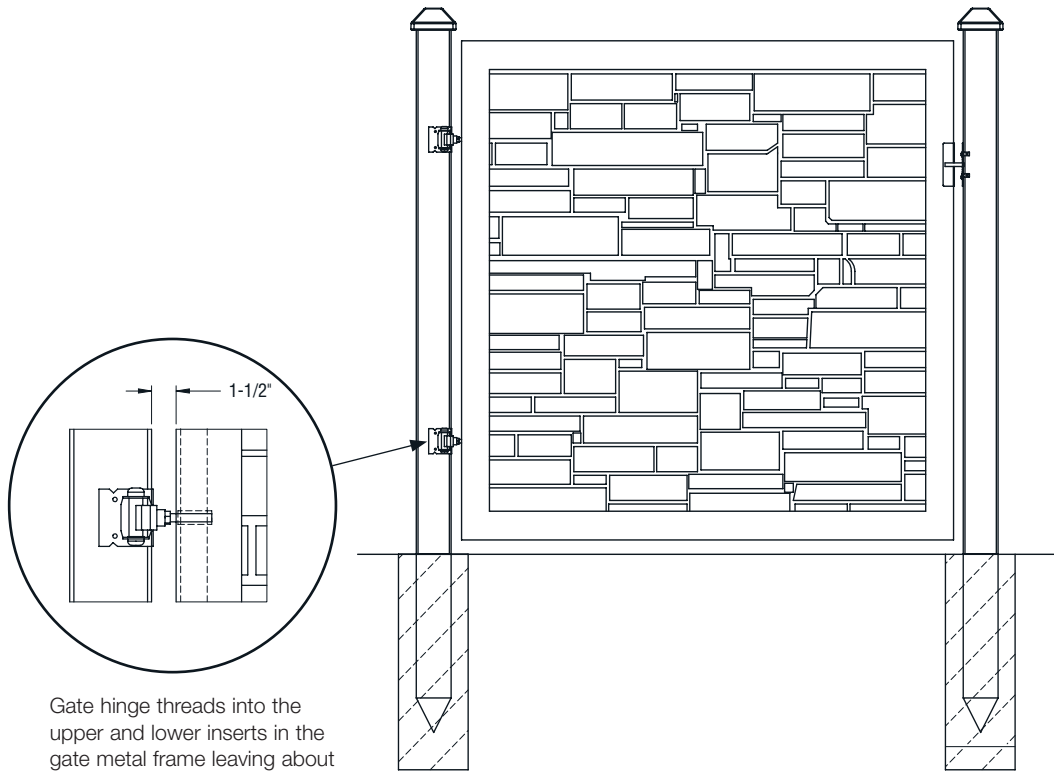
## Fence Panel

72" x 72"

All size fence panels include steel channel in top and bottom rail



# Gate Sizing



Gate hinge threads into the upper and lower inserts in the gate metal frame leaving about 1½" from the edge of the gate to the gate post.

Gate Post



End Post



All gates require about a 1½" gap between the gate and the gate post, and about a 1" gap between the gate and the end post or between the two gates when using double gates. For a single gate, use one gate post and one end post. For double gates, use two gate posts.

← Inside-to-Inside Post Spacing (see table below) →

Gate Width	Single Opening	Double Drive w/3' gate	Double Drive w/4' gate	Double Drive w/5' gate	Double Drive w/6' gate
3'	38½"	76"	88"	100"	111"
4'	50½"	88"	100"	112"	123"
5'	62½"	100"	112"	124"	135"
6'	73½"	111"	123"	135"	146"

# General Information

Be sure to call underground (811) prior to digging. Installation techniques may vary in different regions; be sure to check local requirements prior to installation.

## Concrete Requirements

All posts require concrete to be poured around the post base. All hinge and latch posts require reinforcement using aluminum post inserts high enough to attach gate hardware (or concrete and rebar).

- Avoid "soupy" concrete mix as it will make concrete weak

Concrete Usage for Posts				
Post Size	Fence Height	End Line or Corner Posts	End Posts Filled with Concrete	Gate Posts
4x4	3'	100 lbs	145 lbs	160 lbs
4x4	4'	100 lbs	155 lbs	175 lbs
5x5	5'	140 lbs	235 lbs	270 lbs
5x5	6'	140 lbs	240 lbs	285 lbs
5x5	2 rail	140 lbs	210 lbs	240 lbs
5x5	3 rail	140 lbs	230 lbs	260 lbs
5x5	4 rail	140 lbs	250 lbs	280 lbs

Note: Determine total pounds of concrete required based on number of posts required. Divide by 60 or 80 lb. bag. Figures based on 4x4 hole=10", 5x5 hole=12", both 30" deep.

- Check local codes for frost line depth and regulations

## Solidify Posts - Extruded

Gate hinge and latch posts as well as end posts can be solidified by using an aluminum gate post stiffener inside each post or by filling post with concrete and rebar.\*

### Rebar Separator Clips (for use with rebar and concrete method)

Use 2 clips for each post. Position clips on the rebar approximately 6" down from top and 6" up from bottom. Clips are located in gate hardware box.

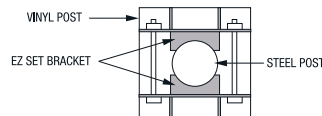
## Alternative Fence Installations

For fence systems on concrete, use steel posts. On concrete applications fence may be installed with 1 5/8" (4x4 post) or 1 7/8" (5x5 post) galvanized steel post set in hydraulic cement. EZ Set bracket bolts to post as a spacer.

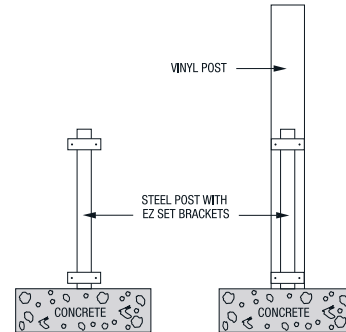
For wall mounting, use wall mount brackets.

## EZ Set Bracket Installation Instructions on Concrete

- Core drill hole into concrete
- Minimum 4" deep
- Post centers will remain the same as normal installation
- Rails will have to be cut down to fit between steel post
- Fill hole with hydraulic cement. Insert steel post
  - For 4" vinyl post, set 1 5/8" OD steel post
  - For 5" vinyl post, set 1 7/8" OD steel post
- Steel post should go at least halfway up the vinyl post



- Put EZ Set brackets together and slide over steel post
- Place one bracket on steel post below where the routed hole will be on your vinyl post
- Place other bracket just below the top of your steel post
- Slide vinyl post over steel post with EZ Set brackets



## Care of the Product

- Place fence components on a non-abrasive surface, such as a drop cloth, to avoid scratching
- Protect components during transportation to your installation site to avoid damage
- Avoid excessive force when assembling components
- Avoid overtightening fasteners
- Clean fence with mild detergent and a plastic scouring pad. For more stubborn stains, use a cleanser such as Soft Scrub® or cleaning solution listed on warranty
- Concrete is easily washed off when wet, but can also be removed when dry

## Gates - Extruded

- Specific gate hardware instructions included with individual components
- Gate(s) must be assembled prior to fence to accurately establish space between hinge and latch posts and height of fence
- Gate requires 2" clearance under bottom rail on level ground
- When building gates in the field, ensure that 1/4" drain holes are drilled in bottom rail
- Determine gate swing direction to assist in ground clearance and positioning
- Steel channel not required in bottom rail of gate

\* Caution – In climates that experience freeze-thaw cycles, this installation method could result in post cracking over time. This would not be covered by the warranty.

# Traditional Picket Fence

Bufftech Cape Cod

## 1. Getting Started

- Be sure to call underground (811) prior to digging
- Assemble gates (if necessary) and decide where they will be located
- Stake out the fence line
- Space and mark post hole locations for gate and sections (spacer bar/template may be useful)
- Start at gate end post and work outward to determine proper fence height relative to ground

## 2. Dig Holes

- Dig holes 30" deep or to frost line
  - Hole size for 4x4 posts = approximately 10"
- Clean holes and check for straight walls
- Bell bottom of holes

## 3. Install First Post

- Insert post in hole
- Determine rough height
- Fill hole around post with concrete mix (sand, gravel and cement) approximately 2" or 4" below grade
- Tamp concrete in hole to eliminate air pockets
- Level and square post

## 4. Install Bottom Rail

- Tape the ends of any rail being inserted into a post that is to be filled with concrete to prevent concrete seepage

- Insert rail into post

*Note: Pickets will attach to rail on the side with the small (1/4") holes*

- Insert lock ring in each end of rail
- Depress lock ring tabs and insert rail in post
- Tabs will recoil to hold rail in post

## 5. Install Second Post

- Insert second post in hole
- Insert bottom rail in post
- Insert block under bottom rail to position at correct fence height
- Fill hole around second post with concrete mix
- Tamp, level and square fence
- Assembly may be continued by installing all bottom rails first, or one section at a time

## 6. Support and Secure

- Level and square fence
- To lower a post, place a wood block from corner to corner on the post and carefully tap with a mallet
- Never strike the PVC post without a wood support

## 7. Install Top Rail

- Insert lock ring in each end of rail
- Depress lock ring tabs, insert top rail in post

## 8. Install Pickets

- For field assembly, insert hex washer head screw through large (3/4") pre-drilled hole in top rail
- Align pre-drilled hole in picket, tighten with 1/2" deep socket wrench or nut driver with clutchdrill (do not overtighten)
- Repeat for bottom rail
- Insert (3/4") hole plug into hole in back side of rail

## 9. Secure Rails

- Square pickets and rails
- Check for even picket spacing on each end of rail
- Top rail may be secured inside post with a #8 x 3/4" screw on each end

## 10. Hang Gate/Install Hardware

- For complete details, see gate installation instructions in hardware box
- Position gate between posts
- Allow 1" gap for hinge and 3/4" for latch and gate swing
- Block up gate to square with fence; rails should be level
- Gate hardware must be secured to two sides of the post

## 11. Solidify Gate Posts

- It is critical that gate hinge and latch posts are solid to ensure proper gate functionality. Two methods are available:

### a. Aluminum gate post stiffener

- Slide aluminum gate stiffener inside hinge, latch or end posts with open end facing routed hole
- Drive a screw through the vinyl into the aluminum stiffener at the bottom of the post to hold in place
- Insert post into ground
- Fill hole with concrete around outside of post

### b. Concrete and rebar\*

- Use two pieces of 1/2" rebar in each hinge, latch and end post
- Rebar should extend from the bottom of the hole to approximately 12" from the top of the post
- Hold rebar in opposite corners of post with rebar separator clips
- Fill post with concrete mix to cover rebar and hardware fasteners
- Tamp post with a rubber mallet to eliminate air pockets
- Leave gate on blocks for 72 hours to allow concrete to set

## 12. Install Caps

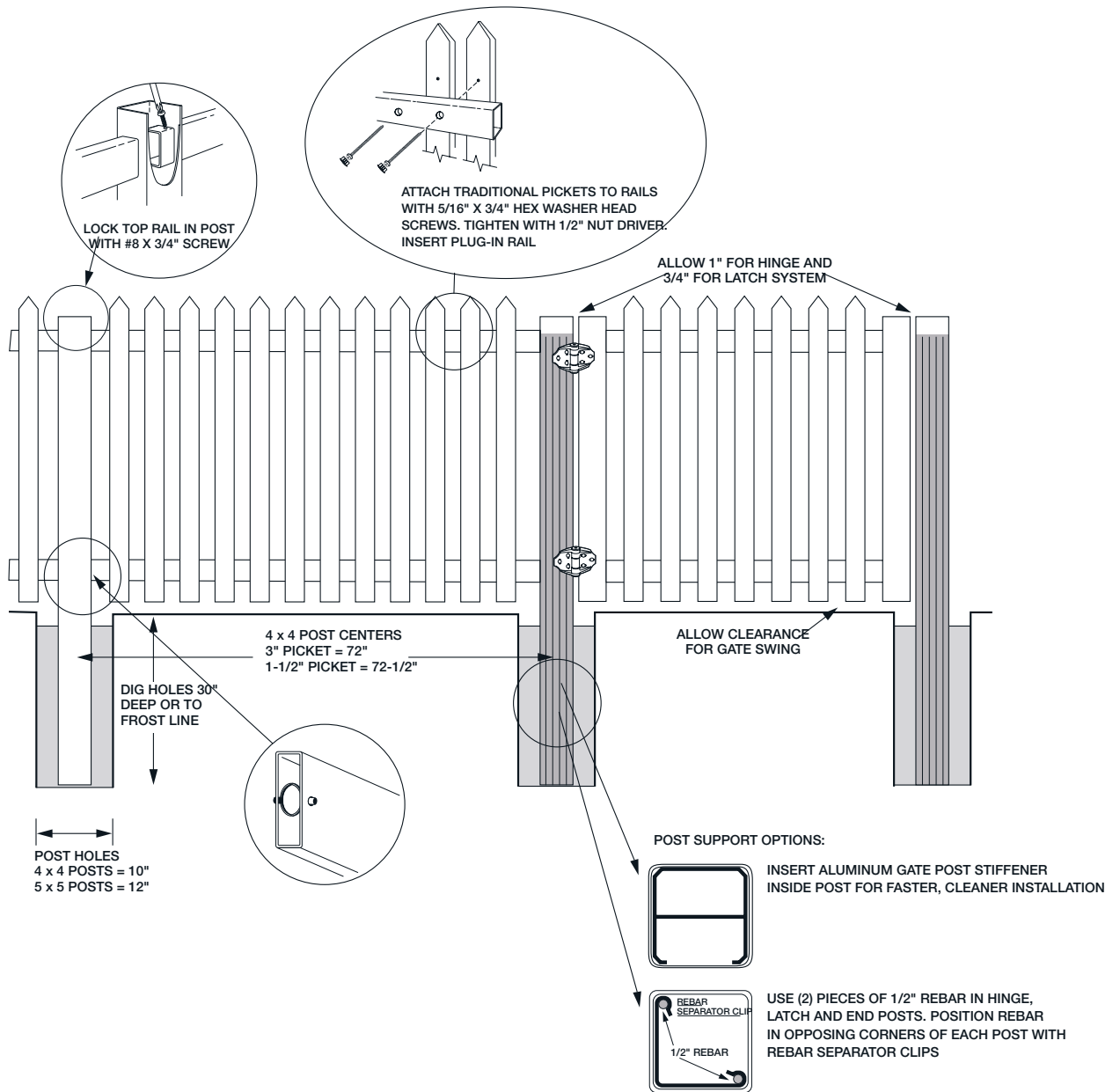
- Install post caps
- Caps may be secured with glue, silicone adhesive or #8 x 3/4" screws, caps and washers

8 \* Caution – In climates that experience freeze-thaw cycles, this installation method could result in post cracking over time. This would not be covered by the warranty.



# Traditional Picket Fence

*Bufftech Cape Cod*



# Traditional Picket Fence

*Bufftech Danbury and Rothbury (straight & concave)*

## 1. Getting Started

- Be sure to call underground (811) prior to digging
- Assemble gates (if necessary) and decide where they will be located
- Stake out the fence line
- Space and mark post hole locations for gate and sections (spacer bar/template may be useful)
- Start at gate end post and work outward to determine proper fence height relative to ground

## 2. Dig Holes

- Dig holes 30" deep or to frost line
  - Hole size for 4x4 posts = approximately 10"
  - Hole size for 5x5 posts = approximately 12"
- Clean holes and check for straight walls
- Bell bottom of holes

## 3. Install First Post

- Insert post in hole
- Determine rough height
- Fill hole around post with concrete mix (sand, gravel and cement) approximately 2" or 4" below grade
- Tamp concrete in hole to eliminate air pockets
- Level and square post

## 4. Install Bottom Rail

- Check bottom rail for drain holes
- Tape the ends of any rail being inserted into a post that is to be filled with concrete to prevent concrete seepage
- Insert lock ring in each end of rail
- Depress lock ring tabs and insert rail in post
- Tabs will recoil to hold rail in post

## 5. Install Second Post

- Insert second post in hole
- Insert bottom rail in post
- Insert block under bottom rail to position at correct fence height
- Fill hole around second post with concrete mix
- Tamp, level and square fence
- Assembly may be continued by installing all bottom rails first, or one section at a time

## 6. Support and Secure

- Level and square fence
- To lower a post, place a wood block from corner to corner on the post and carefully tap with a mallet
- Never strike the PVC post without a wood support

## 7. Install Pickets

- Insert top rail in post with large holes facing down
- Insert pickets through holes in top rail

- Insert pickets in bottom rail. Pickets are crimped to hold in rail

## 8. Secure Rails

- Insert lock ring in each end of rail
- Depress lock ring tabs, insert top rail in post
- Square pickets and rails
- Check for even picket spacing on each end of rail
- Top rail may be secured inside post with a #8 x ¾" screw on each end

## 9. Hang Gate/Install Hardware

- For complete details, see gate installation instructions in hardware box
- Position gate between posts
- Allow 1" gap for hinge and ¾" for latch and gate swing
- Block up gate to square with fence; rails should be level
- Gate hardware must be secured to two sides of the post

## 10. Solidify Gate Posts

- It is critical that gate hinge and latch posts are solid to ensure proper gate functionality. Two methods are available:

### a. Aluminum gate post stiffener

- Slide aluminum gate stiffener inside hinge, latch or end posts with open end facing routed hole
- Drive a screw through the vinyl into the aluminum stiffener at the bottom of the post to hold in place
- Insert post into ground
- Fill hole with concrete around outside of post

### b. Concrete and rebar\*

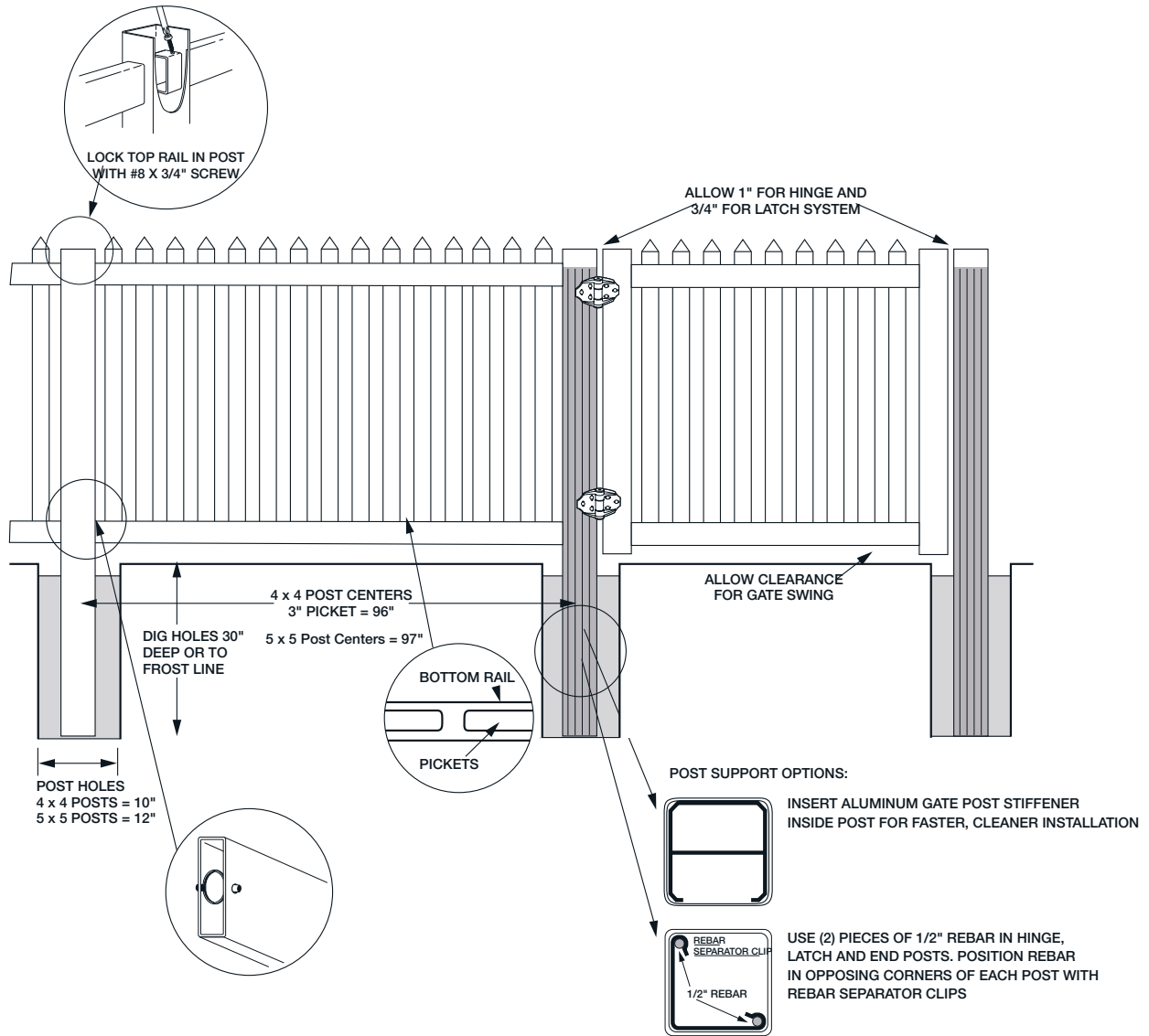
- Use two pieces of ½" rebar in each hinge, latch and end post
- Rebar should extend from the bottom of the hole to approximately 12" from the top of the post
- Hold rebar in opposite corners of post with rebar separator clips
- Fill post with concrete mix to cover rebar and hardware fasteners
- Tamp post with a rubber mallet to eliminate air pockets
- Leave gate on blocks for 72 hours to allow concrete to set

## 11. Install Caps

- Install post caps
- Caps may be secured with glue, silicone adhesive or #8 x ¾" screws, caps and washers

# Traditional Picket Fence

Bufftech Danbury (straight & concave) 4x4 posts, Rothbury (straight & concave) 4x4 posts



# Contemporary Picket Fence

*Bufftech Baron, Baron with TimberGrain, Countess and Princeton*

## 1. Getting Started

- Be sure to call underground (811) prior to digging
- Assemble gates (if necessary) and decide where they will be located
- Stake out the fence line
- Space and mark post hole locations for gate and sections (spacer bar/template may be useful)
- Start at gate end post and work outward to determine proper fence height relative to ground

## 2. Dig Holes

- Dig holes 30" deep or to frost line
  - Hole size for 5 x 5 posts = approximately 12"
  - Hole size for 4 x 4 posts = approximately 10"
- Clean holes and check for straight walls
- Bell bottom of holes

## 3. Install First Post

- Insert post in hole
- Determine rough height
- Fill hole around post with concrete mix (sand, gravel and cement) approximately 2" or 4" below grade
- Tamp concrete in hole to eliminate air pockets
- Level and square post

## 4. Install Bottom Rail

- Check bottom rail for drain holes
- Tape the ends of any rail being inserted into a post that is to be filled with concrete to prevent concrete seepage
- Insert lock ring in each end of rail
- Depress lock ring tabs and insert rail in post
- Tabs will recoil to hold rail in post

## 5. Install Second Post

- Insert second post in hole
- Insert bottom rail in post
- Insert block under bottom rail to position at correct fence height
- Fill hole around second post with concrete mix
- Tamp, level and square fence
- Assembly may be continued by installing all bottom rails first, or one section at a time

## 6. Support and Secure

- Level and square fence
- To lower a post, place a wood block from corner to corner on the post and carefully tap with a mallet
- Never strike the PVC post without a wood support

## 7. Install Pickets and Rails

- Insert mid-rail (if applicable) in post with large holes facing down. Do not install lock rings at this point
- Insert pickets through holes in mid-rail

- Insert pickets in bottom rail. Temporarily remove mid-rail ends from post. Insert top rail over pickets
- Insert lock ring in end of rail(s)
- Depress lock ring tabs and insert rail(s) in post
- Insert mid-rail and top rail in post

## 8. Secure Rails

- Square pickets and rails
- Check for even picket spacing on each end of rail
- Secure rail inside post with a #8 x ¾" screw (do this on both ends)
- Level mid-rail, secure rail to pickets with (2) #8 x 1½" screws, snap caps and washers evenly spaced along rail

## 9. Hang Gate/Install Hardware

- For complete details, see gate installation instructions in hardware box
- Position gate between posts
- Allow 1" gap for hinge and ¾" for latch and gate swing
- Block up gate to square with fence; rails should be level
- Gate hardware must be secured to two sides of the post

## 10. Solidify Gate Posts

- It is critical that gate hinge and latch posts are solid to ensure proper gate functionality. Two methods are available:

### a. Aluminum gate post stiffener

- Slide aluminum gate stiffener inside hinge, latch or end posts with open end facing routed hole
- Drive a screw through the vinyl into the aluminum stiffener at the bottom of the post to hold in place
- Insert post into ground
- Fill hole with concrete around outside of post

### b. Concrete and rebar\*

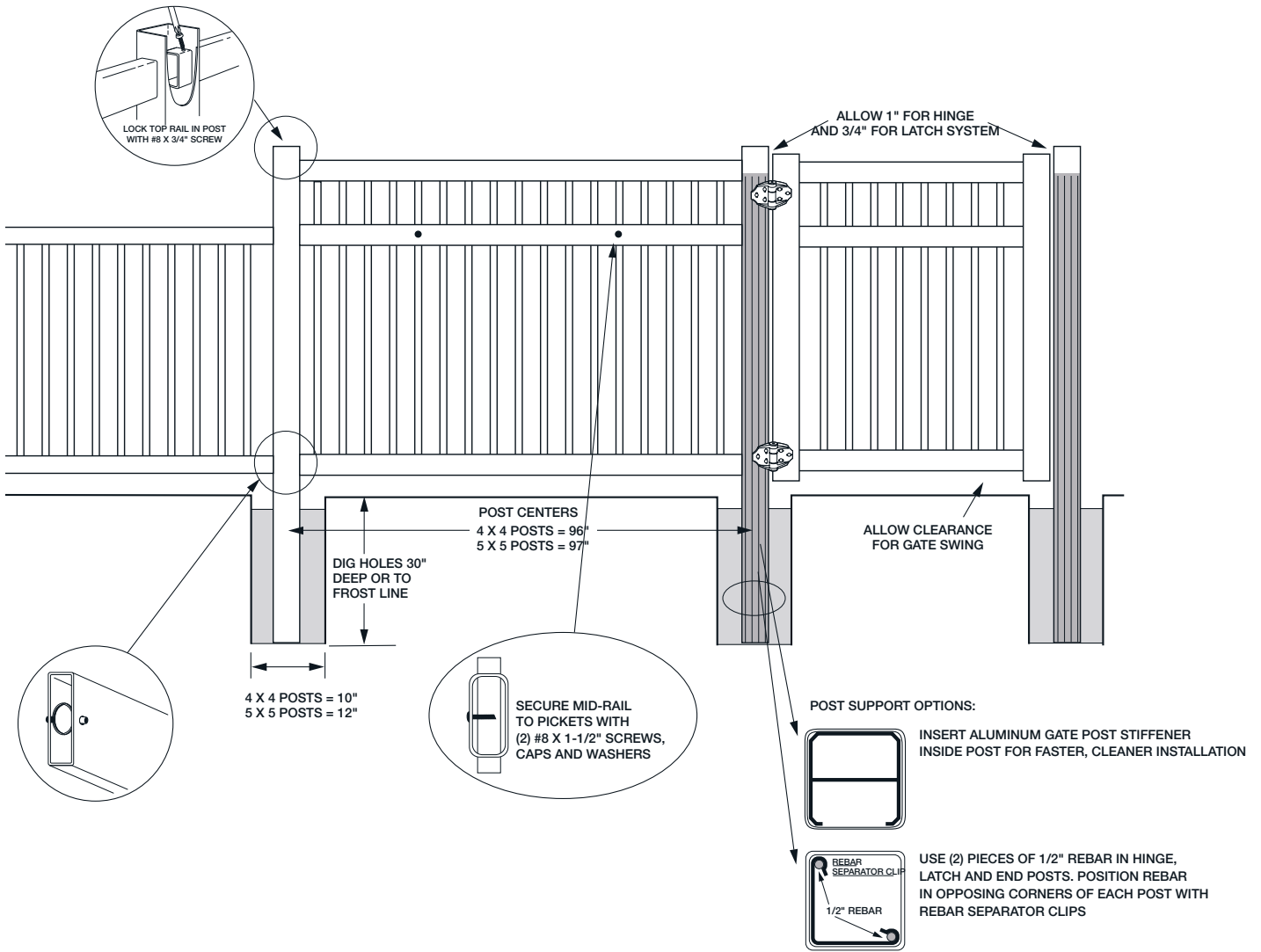
- Use two pieces of ½" rebar in each hinge, latch and end post
- Rebar should extend from the bottom of the hole to approximately 12" from the top of the post
- Hold rebar in opposite corners of post with rebar separator clips
- Fill post with concrete mix to cover rebar and hardware fasteners
- Tamp post with a rubber mallet to eliminate air pockets
- Leave gate on blocks for 72 hours to allow concrete to set

## 11. Install Caps

- Install post caps
- Caps may be secured with glue, silicone adhesive or #8 x ¾" screws, caps and washers

# Contemporary Picket Fence

*Bufftech Baron, Baron with TimberGrain, Countess and Princeton*



# Classic Fence

## Manchester (straight & concave)

### 1. Getting Started

- Be sure to call underground (811) prior to digging
- Assemble gates (if necessary) and decide where they will be located
- Stake out the fence line
- Space and mark post hole locations for gate and sections (spacer bar/template may be useful)
- Start at gate end post and work outward to determine proper fence height relative to ground

### 2. Dig Holes

- Dig holes 30" deep or to frost line
  - Hole size for 5x5 posts = approximately 12"
- Clean holes and check for straight walls
- Bell bottom of holes

### 3. Install First Post

- Insert post in hole
- Determine rough height
- Fill hole around post with concrete mix (sand, gravel and cement) approximately 2" or 4" below grade
- Tamp concrete in hole to eliminate air pockets
- Level and square post

### 4. Install Bottom Rail

- Tape the ends of any rail being inserted into a post that is to be filled with concrete to prevent concrete seepage
- Insert lock ring in each end of rail
- Depress lock ring tabs and insert rail in post. Tabs will recoil to hold rail in post

### 5. Install Second Post

- Insert second post in hole
- Insert bottom rail in post
- Insert block under bottom rail to position at correct fence height
- Fill hole around second post with concrete mix
- Tamp, level and square fence
- Assembly may be continued by installing all bottom rails first, or one section at a time

### 6. Support and Secure

- Level and square fence
- To lower a post, place a wood block from corner to corner on the post and carefully tap with a mallet
- Never strike the PVC post without a wood support

### 7. Install Rails & Pickets

- Insert lock ring in each end of rail
- Middle and upper rails are routed with larger holes on the bottom for ease of installation and racking

- For Manchester - Depress lock ring and insert top rail in post. Pickets are factory crimped to hold in rail. Insert pickets through rail into bottom rail
- For Manchester Concave - 8 longer pickets are supplied for in-field design and cutting
- Field cut pickets should be cut to size and then crimped, or drill a ¼" hole in one side, 1" from the bottom
- Install bullet clip in hole and insert picket into rail

### 8. Hang Gate/Install Hardware

- For complete details, see gate installation instructions in hardware box
- Position gate between posts
- Allow 1" gap for hinge and ¾" for latch and gate swing
- Block up gate to square with fence; rails should be level
- Gate hardware must be secured to two sides of the post

### 10. Solidify Gate Posts

- It is critical that gate hinge and latch posts are solid to ensure proper gate functionality. Two methods are available:

#### a. Aluminum gate post stiffener

- Slide aluminum gate stiffener inside hinge, latch or end posts with open end facing routed hole
- Drive a screw through the vinyl into the aluminum stiffener at the bottom of the post to hold in place
- Insert post into ground
- Fill hole with concrete around outside of post

#### b. Concrete and rebar\*

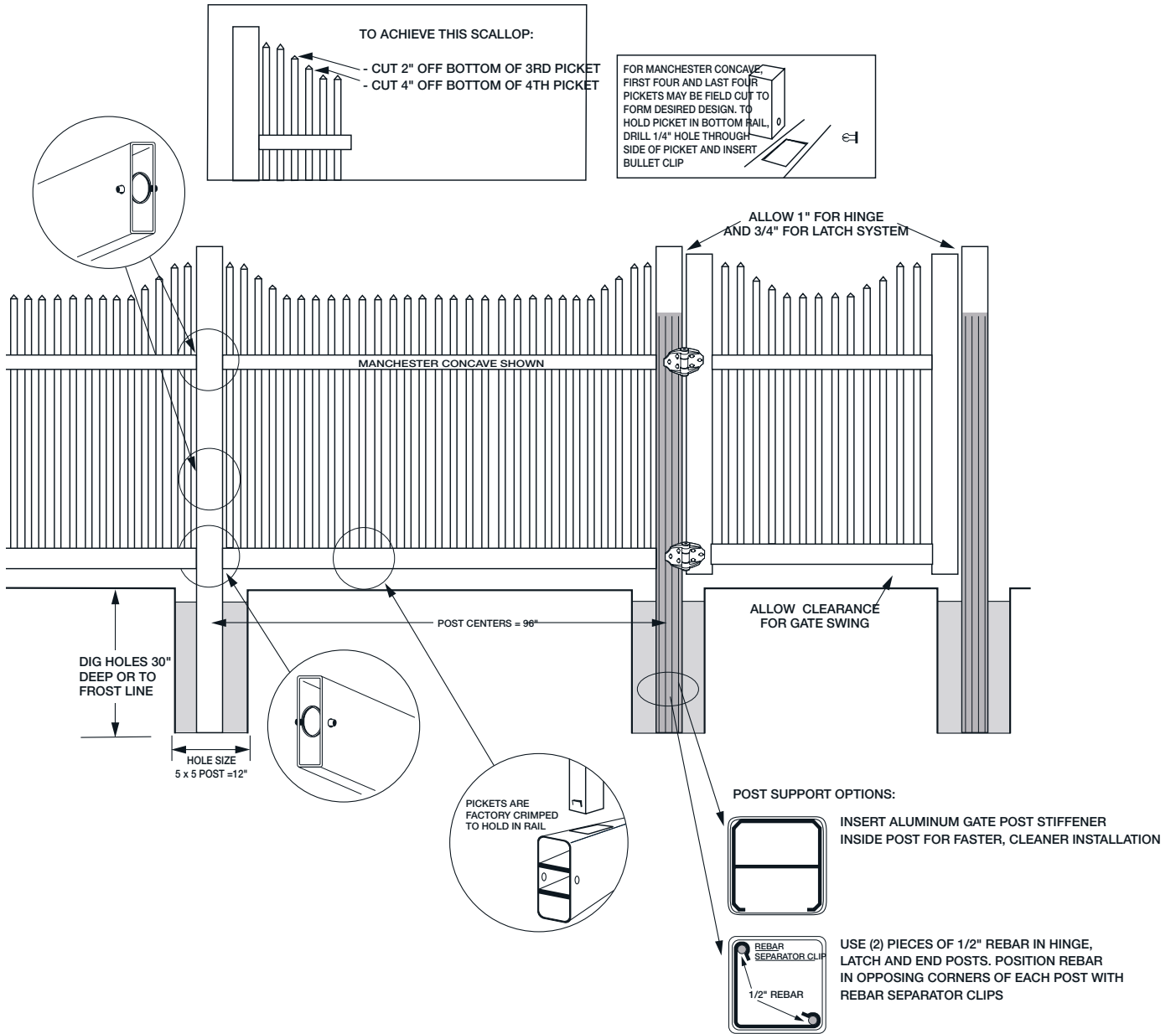
- Use two pieces of ½" rebar in each hinge, latch and end post
- Rebar should extend from the bottom of the hole to approximately 12" from the top of the post
- Hold rebar in opposite corners of post with rebar separator clips
- Fill post with concrete mix to cover rebar and hardware fasteners
- Tamp post with a rubber mallet to eliminate air pockets
- Leave gate on blocks for 72 hours to allow concrete to set

### 11. Install Caps

- Install post caps
- Caps may be secured with glue, silicone adhesive or #8 x ¾" screws, caps and washers

# Classic Fence

## Manchester (straight & concave)



# Semi-Private Fence

Bufftech Imperial, Imperial with TimberGrain

## 1. Getting Started

- Be sure to call underground (811) prior to digging
- Assemble gates (if necessary) and decide where they will be located
- Stake out the fence line
- Space and mark post hole locations for gate and sections (spacer bar/template may be useful)
- Start at gate end post and work outward to determine proper fence height relative to ground

## 2. Dig Holes

- Dig holes 30" deep or to frost line
  - Hole size for 5x5 posts = approximately 12"
  - Hole size for 4x4 posts = approximately 10"
- Clean holes and check for straight walls
- Bell bottom of holes

## 3. Install First Post

- Insert post in hole
- Determine rough height
- Fill hole around post with concrete mix (sand, gravel and cement) approximately 2" or 4" below grade
- Tamp concrete in hole to eliminate air pockets
- Level and square post

## 4. Install Bottom Rail

- Check bottom rail for drain holes
- Tape the ends of any rail being inserted into a post that is to be filled with concrete to prevent concrete seepage
- Insert lock ring in each end of rail
- Depress lock ring tabs and insert rail in post
- Tabs will recoil to hold rail in post

## 5. Install Second Post

- Insert second post in hole
- Insert bottom rail in post
- Insert block under bottom rail to position at correct fence height
- Fill hole around second post with concrete mix
- Tamp, level and square fence
- Fence assembly may be continued by installing all bottom rails first, or one section at a time

## 6. Support and Secure

- Level and square fence
- To lower a post, place a wood block from corner to corner on the post and carefully tap with a mallet
- Never strike the PVC post without a wood support

## 7. Install Pickets and Rails

- Insert mid-rail (if applicable) in post with large holes facing down. Do not install lock rings at this point
- Insert pickets through holes in mid-rail
- Insert pickets in bottom rail. Temporarily remove middle

rail ends from post. Insert top rail over pickets

- Insert lock rings in end of rail(s)
- Depress lock ring tabs and insert rail(s) in post
- Insert mid-rail and top rail in post

## 8. Secure Rails

- Square pickets and rails
- Check for even picket spacing on each end of rail
- Secure rail inside post with a #8 x 3/4" screw (do this on both ends)
- Level mid-rail, secure rail to pickets with (2) #8 x 1 1/2" screws, snap caps and washers evenly spaced along rail

## 9. Hang Gate/Install Hardware

- For complete details, see gate installation instructions in hardware box
- Position gate between posts
- Allow 1" gap for hinge and 3/4" for latch and gate swing
- Block up gate to square with fence; rails should be level
- Gate hardware must be secured to two sides of the post

## 10. Solidify Gate Posts

- It is critical that gate hinge and latch posts are solid to ensure proper gate functionality. Two methods are available:

### a. Aluminum gate post stiffener

- Slide aluminum gate stiffener inside hinge, latch or end posts with open end facing routed hole
- Drive a screw through the vinyl into the aluminum stiffener at the bottom of the post to hold in place
- Insert post into ground
- Fill hole with concrete around outside of post

### b. Concrete and rebar\*

- Use two pieces of 1/2" rebar in each hinge, latch and end post
- Rebar should extend from the bottom of the hole to approximately 12" from the top of the post
- Hold rebar in opposite corners of post with rebar separator clips
- Fill post with concrete mix to cover rebar and hardware fasteners
- Tamp post with a rubber mallet to eliminate air pockets
- Leave gate on blocks for 72 hours to allow concrete to set

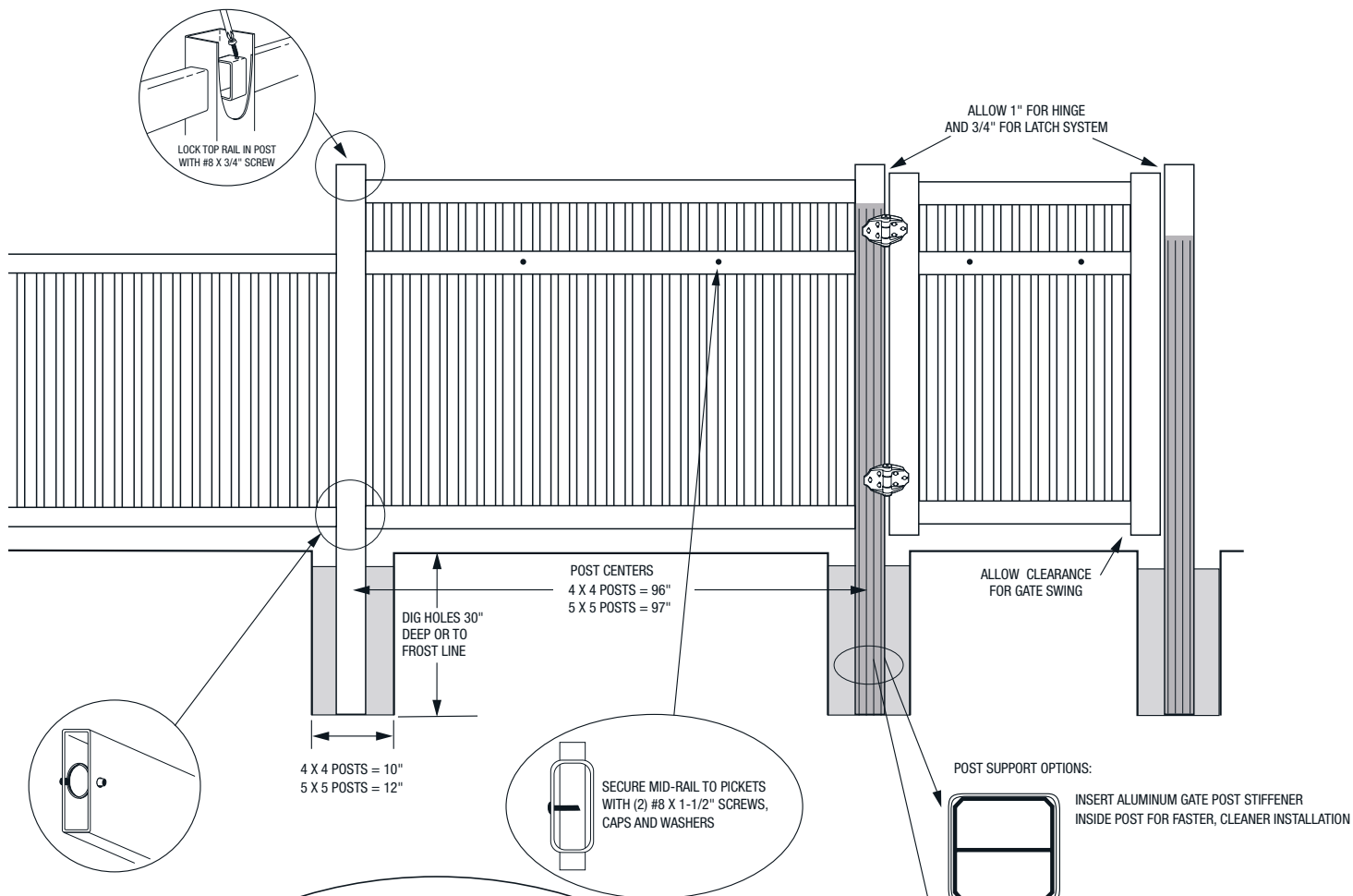
## 11. Install Caps

- Install post caps
- Caps may be secured with glue, silicone adhesive or #8 x 3/4" screws, caps and washers



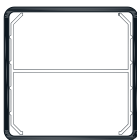
# Semi-Private Fence

Bufftech Imperial, Imperial with TimberGrain



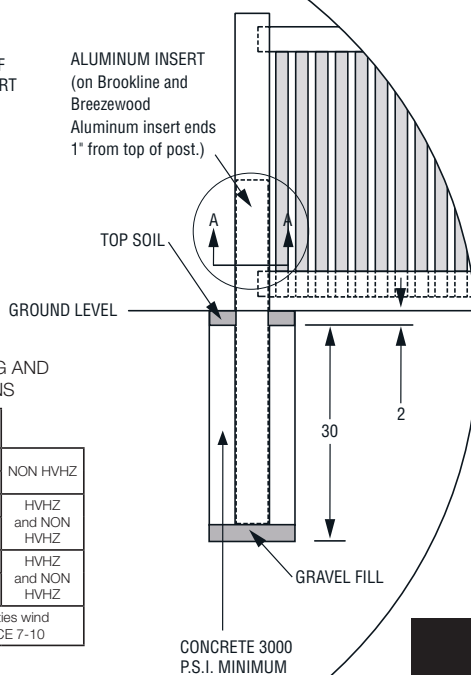
## EMBEDMENT DETAIL FOR OPTIONAL LINE POST STIFFENER ALUMINUM INSERT

TO COMPLY WITH THE HIGH VELOCITY HURRICANE ZONES SECTION R44003.1.2.1 OF THE FLORIDA BUILDING CODE, A STEEL INSERT MUST BE ADDED TO THE TOP RAIL AND THE CENTER PICKET MUST BE ATTACHED TO THE TOP AND BOTTOM RAIL WITH (2) #8 X 1-1/2" SCREWS, CAPS, AND WASHERS



SECTION A-A  
LINE POST STIFFENER  
ALUMINUM INSERT

ALUMINUM INSERT (on Brookline and Breezewood Aluminum insert ends 1" from top of post.)



### MAXIMUM POST SPACING AND FOOTING DIMENSIONS

Wind Exposure	Footing Depth	Max. Post Spacing	
B	30"	97"	NON HVHZ
B	24"	66"	
C	36"	88"	
C	30"	68"	HVHZ and NON HVHZ
D	36"	75"	HVHZ and NON HVHZ
D	30"	56"	

HVHZ: Miami-Dade and Broward counties wind exposures as defined in the ASCE 7-10



FEATURING  
WINDCODE  
PERFORMANCE

Stepping Recommended

# Semi-Private Fence

## Bufftech Breezewood and Breezewood with TimberGrain

### 1. Getting Started

- Be sure to call underground (811) prior to digging
- Assemble gates (if necessary) and decide where they will be located
- Stake out the fence line
- Space and mark post hole locations for gate and sections (spacer bar/template may be useful)
- Start at gate end post and work outward to determine proper fence height relative to ground
- If there are going to be short sections, those should be installed first

### 2. Dig Holes

- Dig holes 30" deep or to frost line
  - Hole size for 5 x 5 posts = approximately 12"
- Clean holes and check for straight walls
- Bell bottom of holes

### 3. Install First Post

- Insert post in hole
- Determine rough height
- Fill hole around post with concrete mix (sand, gravel and cement) approximately 2" or 4" below grade
- Tamp concrete in hole to eliminate air pockets
- Level and square post

### 4. Install Bottom Rail

- Tape the ends of any rails and pickets being inserted into a post that is to be filled with concrete to prevent concrete seepage
- Insert lock ring in end of rail
- Depress lock ring tabs and insert rail in post
- Tabs will recoil to hold rail in post

### 5. Install Second Post

- Insert second post in hole
- Insert bottom rail in post
- Insert block under bottom rail to position at correct fence height
- Fill hole around second post with concrete mix
- Tamp, level and square fence
- Fence assembly may be continued by installing all bottom rails first, or one section at a time

### 6. Support and Secure

- Level and square fence
- To lower a post, place a wood block from corner to corner on the post and carefully tap with a mallet
- Never strike the PVC post without a wood support

### 7. Install Pickets and Rails

- Insert mid-brace in bottom rail
- Insert pickets through holes in mid-brace
- Insert pickets in post far enough to clear other post. Pull pickets into post until crimps lock picket into post

- Insert mid-brace into top rail
- Insert top rail into post
- Pickets can be field crimped for short sections

### 8. Secure Rails

- Depress lock ring tabs, insert top rail in post
- Square pickets and rails
- Check for even mid-brace spacing on each end of rail
- Secure rail inside post with a #8 x ¾" screw (do this on both ends)
- Level pickets, secure mid-brace to rails with (2) #8 x 1½" screws, snap caps and washers
- Mid-brace is not required for sections with post centers less than 48"

### 9. Hang Gate/Install Hardware

- For complete details, see gate installation instructions in hardware box
- Position gate between posts
- Allow 1" gap for hinge and ¾" for latch and gate swing
- Block up gate to square with fence; rails should be level
- Gate hardware must be secured to two sides of the post

### 10. Solidify Gate Posts

- It is critical that gate hinge and latch posts are solid to ensure proper gate functionality. Two methods are available:

#### a. Aluminum gate post stiffener

- Slide aluminum gate stiffener inside hinge, latch or end posts with open end facing routed hole
- Drive a screw through the vinyl into the aluminum stiffener at the bottom of the post to hold in place
- Insert post into ground
- Fill hole with concrete around outside of post

#### b. Concrete and rebar\*

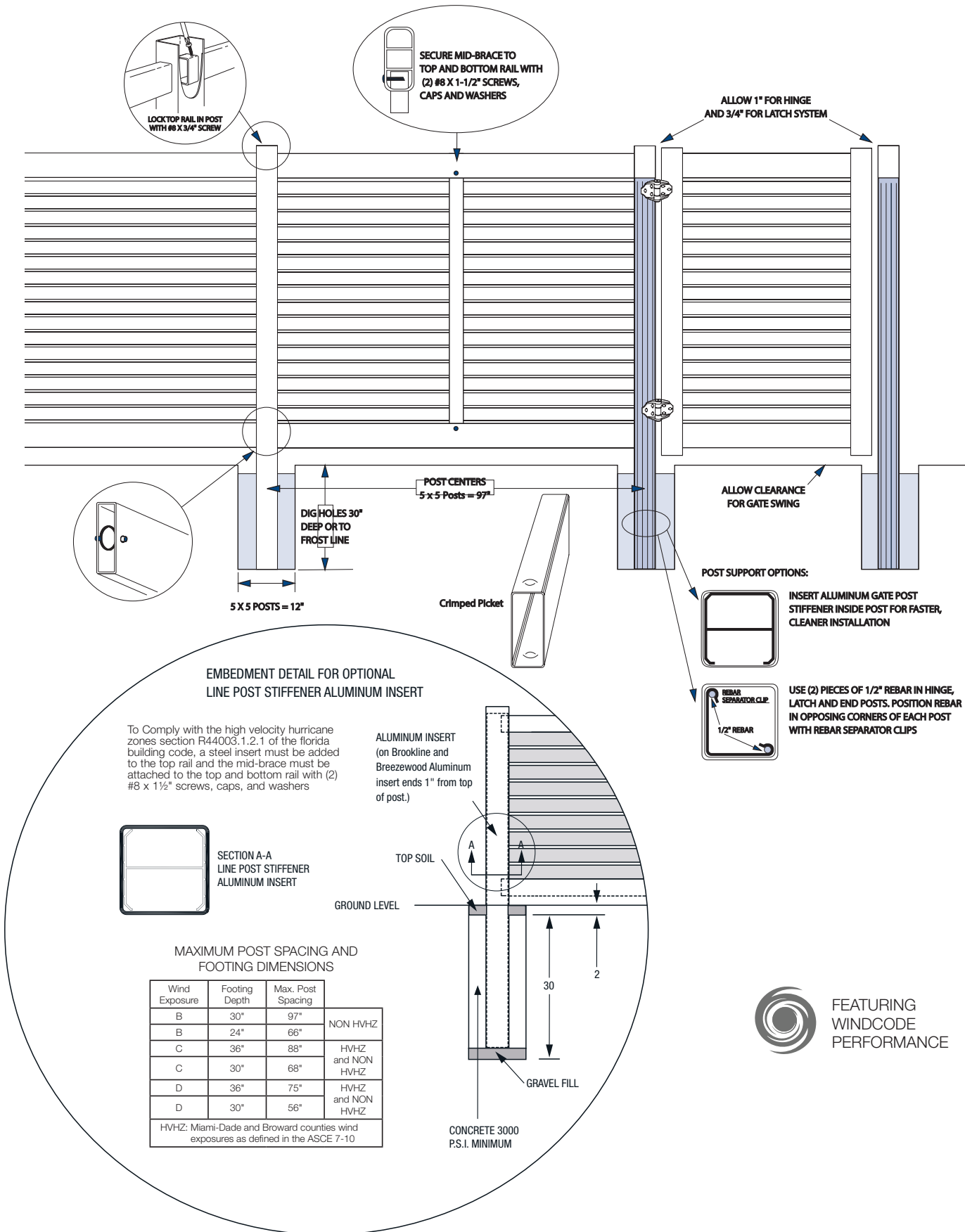
- Use two pieces of ½" rebar in each hinge, latch and end post
- Rebar should extend from the bottom of the hole to approximately 12" from the top of the post
- Hold rebar in opposite corners of post with rebar separator clips
- Fill post with concrete mix to cover rebar and hardware fasteners
- Tamp post with a rubber mallet to eliminate air pockets
- Leave gate on blocks for 72 hours to allow concrete to set

### 11. Install Caps

- Install post caps
- Caps may be secured with glue, silicone adhesive or #8 x ¾" screws, caps and washers

# Semi-Private Fence

Bufftech Breezewood and Breezewood with TimberGrain



# Privacy Fence

## Simtek EcoStone 4' and 6' High

### 1. Getting Started

- Be sure to call underground (811) prior to digging
- Determine gate location(s)
- Stake out the fence line
- Space and mark post hole locations for gate and sections (spacer bar/template may be useful)
- Start at an end, gate, or corner post and work outward to determine proper fence height relative to ground. If there is a slope it is easier to begin at the top end and work your way downhill

### 2. Dig Holes

- Dig holes 30" deep or to frost line
  - Hole size for 5 x 5 posts = approximately 12"
- Clean holes and check for straight walls
- Bell bottom of holes

### 3. Install Panel Brackets

*(Note: brackets come attached to the tip of fence posts)*

- Determine height of bracket from top of post
- Attach bracket to post with #14 hex washer head self-tapping screw

*Note: Put the screw through the hole as close to the top as you are able*

- A template can speed attachment for level installations

### 4. Cutting Down Posts (if required)

- Measure height from top of post
- Cut off bottom of post with metal cutting blade
- Never cut the top of the post

### 5. Setting Posts

- Insert post in hole
- Determine rough height
- Fill hole around post with concrete mix (sand, gravel and cement) approximately 2" or 4" below grade
- Tamp concrete in hole to eliminate air pockets
- Level and square post

### 6. Spacing Posts (See page 25 for post centers)

- Use steel stiffener from panel to ensure panels are level
- Place stiffener between posts
- Set post (leave spacer in place for one hour minimum)

**ProTip: create your own template/spacer to ensure post spacing.**

6'x 6' = 70¾"

4'x 8' = 95"

### 7. Install Fence Panels

- Check to ensure top and bottom rails have stiffeners. They come installed, however, may have been removed to use as spacers when setting posts
- Lift panel to approximately 4' off ground
- Insert panel into channel on first post
- Flex the next post until the channel will receive panel
- Ease panel down onto panel brackets
- Level panel

### 8. Secure Fence Panels

- Panels must be attached to end, gate, and corner post with one fastener per panel
- To prevent unauthorized panel removal, you can attach one end of each panel into the post with one fastener
- Never attach both ends of a panel to posts

### 9. Cutting Panels (if required)

- Remove steel stiffeners from panel
- Determine distance between posts from inside of channel to inside of channel
- Cut stiffeners to that width
- Measure and mark panel ½" shorter than stiffeners (this is needed for expansion and contraction of panel)
- Cut panel

### 10. Gate Openings

- Post spacing is critical. The ideal spacing is 1" on latch post and 1½" between hinge post
- Hinges should be attached to a gate post

### 11. Gate Installation

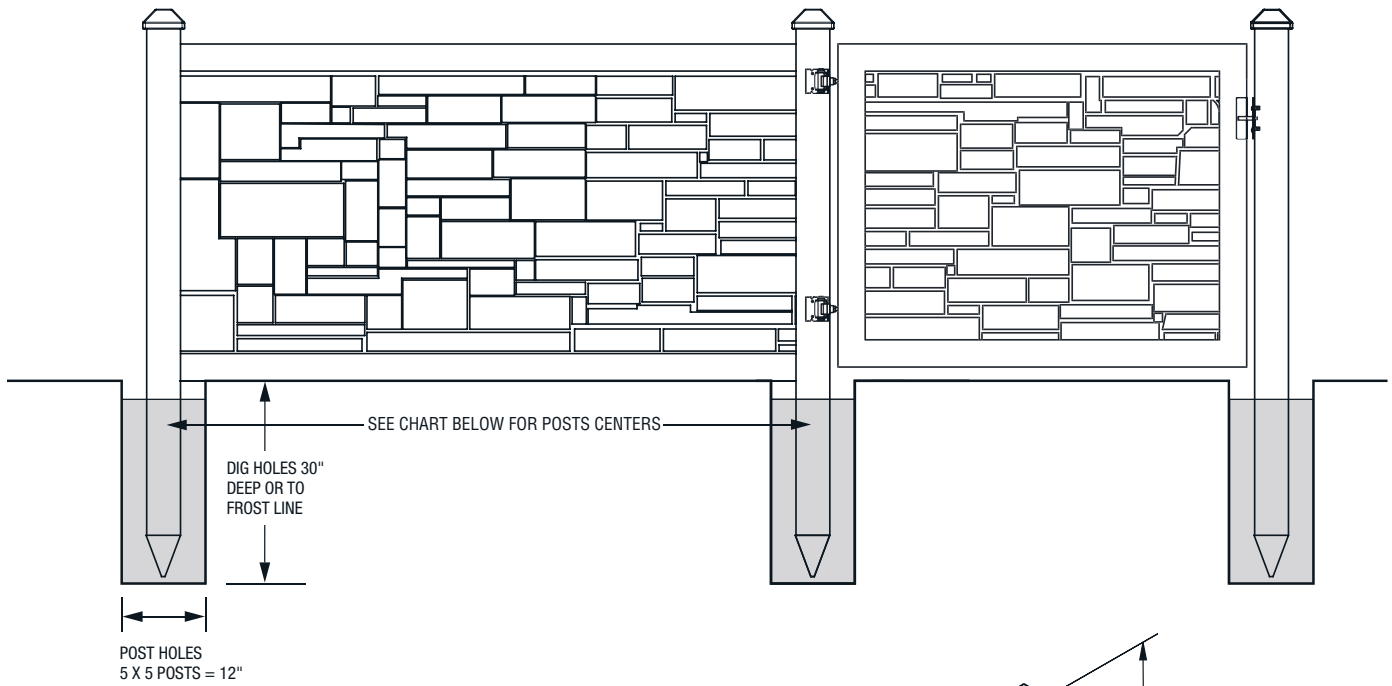
- First, attach striker bar to gate using provided button head screws
- Thread the ½" hinge rod into the upper and lower inserts in the metal gate frame leaving approximately 1½" from the edge of the gate to the bracket
- Determine proper height for gate and block up gate square with fence
- Attach hinges to gate post with 2½" self-tapping screws provided (do not over tighten screws as this can crush the internal foam and make an indentation in the post)
- Level the gate
- Align the latch with the striker bar and attach the latch to end post with 2½" self-tapping screws provided

### 12. Install Caps

- Install post caps (caps are pressure fit, however a 3" deck screw can be driven through the top of the cap into the middle of the post if desired)

# Privacy Fence

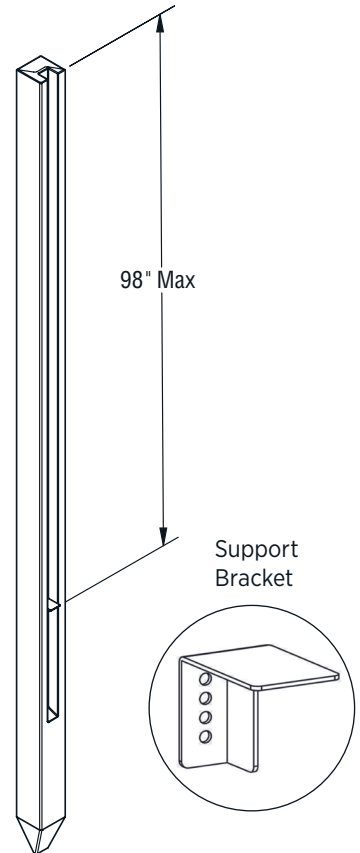
Simtek EcoStone 4' and 6' High



Panel Size	4'	6'	8'
Bracket Location from top of post	50"	74"	98"

### Center to Center Post Dimensions

		Line	Corner	End	Gate
6'x6'	Line	72"	73"	72"	73"
	Corner		74"	73"	74"
4'x8'	Line	96"	97"	96"	97"
	Corner		98"	97"	98"



FEATURING  
WINDCODE  
PERFORMANCE

# Privacy Fence

## Simtek EcoStone 8' High

### 1. Getting Started

- Be sure to call underground (811) prior to digging
- Determine gate location(s)
- Stake out the fence line
- Space and mark post hole locations for gate and sections (spacer bar/template may be useful)
- Start at an end, gate, or corner post and work outward to determine proper fence height relative to ground. If there is a slope it is easier to begin at the top end and work your way downhill

### 2. Dig Holes

- Dig holes 48" deep
  - Hole size for 5x5 posts = approximately 12"
- Clean holes and check for straight walls
- Bell bottom of holes

### 3. Install Fence Brackets

*Note: Brackets come attached to the tip of fence posts*

- Determine height of bracket from top of post
- Attach bracket to post with #14 hex washer head self-tapping screw

*Note: Put the screw through the hole as close to the top as you are able*

- A template can speed attachment for level installations

### 4. Cutting Down Posts (if required)

- Measure height from top of post
- Cut off bottom of post with metal cutting blade
- Never cut the top of the post

### 5. Setting Post

- Insert post in hole
- Determine rough height
- Fill hole around post with concrete mix (sand, gravel and cement) approximately 2" or 4" below grade
- Tamp concrete in hole to eliminate air pockets
- Level and square post

### 6. Spacing Posts

- Use steel stiffener from panel (95" – 8')
- Place stiffener between posts
- Set post (leave spacer in place for one hour minimum)
- Set 3 to 4 posts with stiffeners as spacers, then advance them one at a time starting with the first stiffener

### 7. Install Bottom Fence Panels

- Check to ensure top and bottom rails have stiffeners. They come installed, however, may have been removed to use as spacers when setting posts
- Lift panel and insert into post channels
- Ease panel down onto fence brackets
- Level panel

*Note: Be certain that the 2" high rail is on top of the bottom panel*

### 8. Install top panel

- Lift panel and insert into post channels
- Ease panel down onto bottom panel

*Note: Be certain the 2" high rail is on the bottom of the top panel*

**Pro Tip: When installing panels, insert a short piece of 1-3/8" pipe into both ends of the panel to use as handles. 2x6 wood blocks can be used to support panel while lowering.**

### 9. Secure fence panels

- Panels must be attached to end and gate post with one fastener per panel
- To prevent unauthorized panel removal, you can attach one end of each panel into the post with one fastener
- Never attach both ends of a panel to posts

### 10. Cutting panels (if required)

- Remove steel stiffeners from panel
- Determine distance between posts from inside of channel to inside of channel
- Cut stiffeners ¼" shorter than that measurement
- Measure and mark panel ¼" shorter than stiffeners (this is needed for expansion and contraction of panel)
- Cut panel
- A cut panel bracket is required on top and bottom cut panels.

**Pro Tip: Pinning the cut panel bracket in place will help with installation**

### 11. Gate openings

- Post spacing is critical. The ideal spacing is 1" on latch post and 1½" between hinge post.
- Hinges should be attached to a gate post

### 12. Gate installation

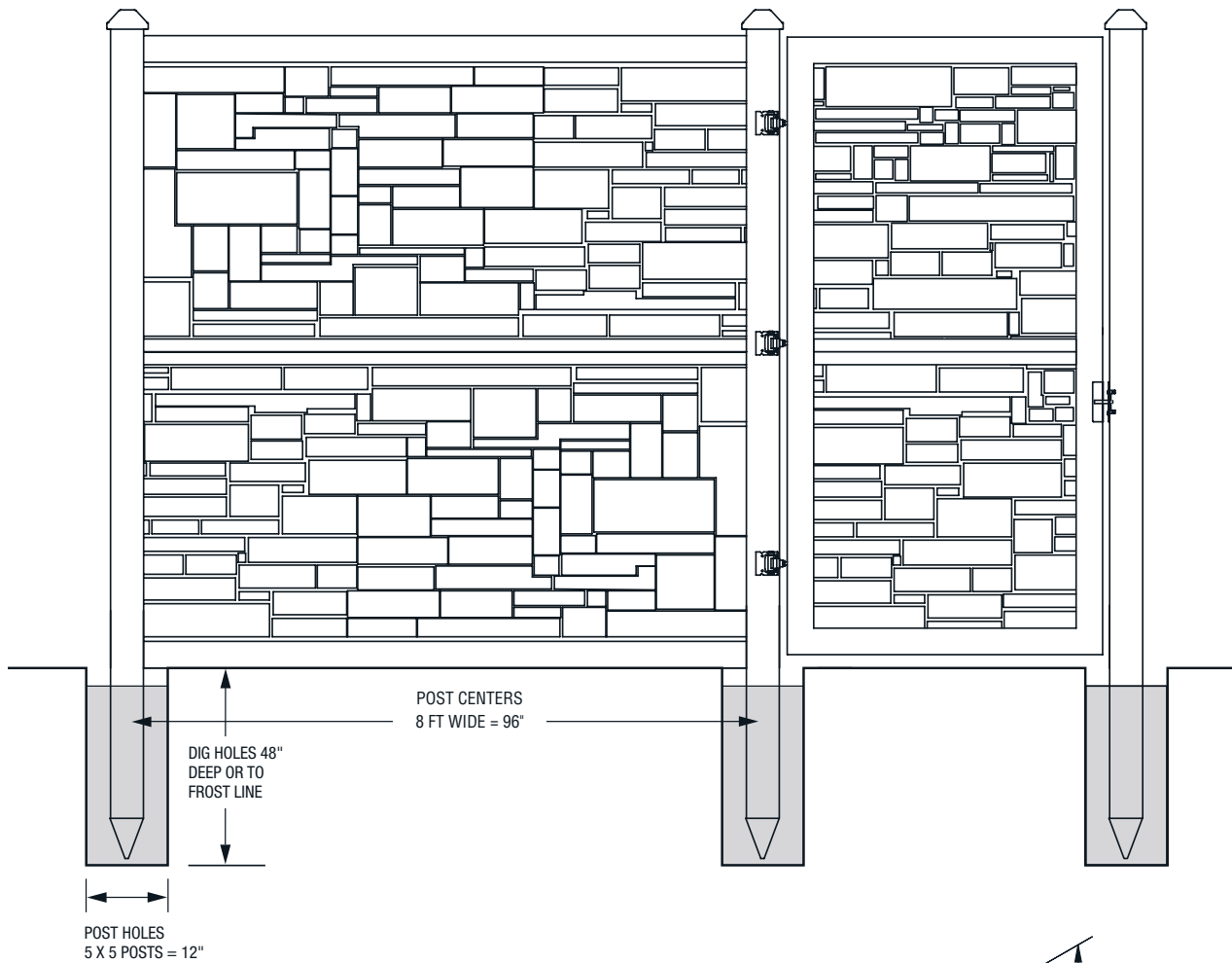
- First, attach striker bar to gate using provide button head screws
- Thread the ½" hinge rod into the upper and lower inserts in the metal gate frame leaving approximately 1½" from the edge of the gate to the bracket.
- Determine proper height for gate and block up gate square with fence
- Attach hinges to gate post with 2½" self-tapping screws provided (do not over tighten screws as this can crush the internal foam and make an indentation in the post)
- Level the gate
- Align the latch with the striker bar and attach the latch to end post with 2½" self-tapping screws provided

### 13. Install caps

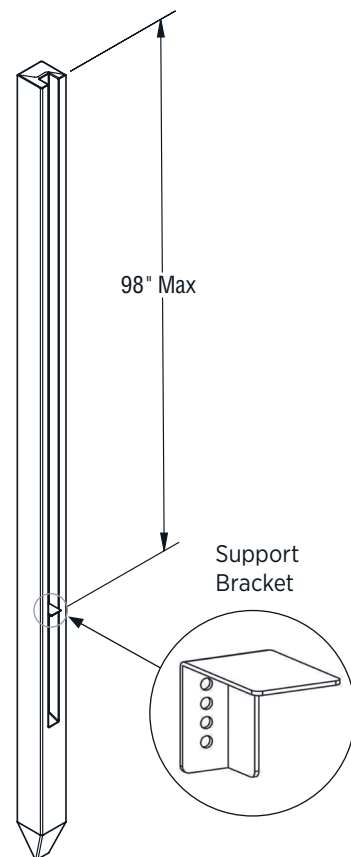
- Install post caps (caps are pressure fit, however a 3" stainless steel deck screw can be driven through the top of the cap into the middle of the post if desired)

# Privacy Fence

*ISimtek EcoStone 8' High*



Panel Size	4'	6'	8'
Bracket Location from top of post	50"	74"	98"



# Privacy Fence

## Simtek Sherwood 4' and 6' High

### 1. Getting Started

- Be sure to call underground (811) prior to digging
- Determine gate location(s)
- Stake out the fence line
- Space and mark post hole locations for gate and sections (spacer bar/template may be useful)
- Start at an end, gate, or corner post and work outward to determine proper fence height relative to ground. If there is a slope it is easier to begin at the top end and work your way downhill

### 2. Dig Holes

- Dig holes 48" deep
  - Hole size for 5 x 5 posts = approximately 12"
- Clean holes and check for straight walls
- Bell bottom of holes

### 3. Install Panel Brackets

*Note: Brackets come attached to the tip of fence posts*

- Determine height of bracket from top of post
- Attach bracket to post with #14 hex washer head self-tapping screw

*Note: Put the screw through the hole as close to the top as you are able*

- A template can speed attachment for level installations

### 4. Cutting Down Posts *(if required)*

- Measure height from top of post
- Cut off bottom of post with metal cutting blade
- Never cut the top of the post

### 5. Setting Posts

- Insert post and hole
- Determine rough height
- Fill hole around post with concrete mix (sand, gravel and cement) approximately 2" or 4" below grade
- Tamp concrete in hole to eliminate air pockets
- Level and square post

### 6. Spacing Posts *(See page 25 for post centers)*

- Use steel stiffener from panel to ensure panels will level
- Place stiffener between posts.
- Set post (leave spacer in place for one hour minimum)

**ProTip: create your own template/space to ensure post spacing.**

$$6' \times 6' = 70\frac{3}{4}''$$
$$4' \times 8' = 95''$$

### 7. Install Fence Panels

- Check to ensure top and bottom rails have stiffeners. They come installed, however may have been removed to use as spacers when setting posts
- Lift panel to approximately 4' off ground
- Insert panel into channel on first post
- Flex the next post until the channel will receive panel
- Ease panel down onto fence brackets
- Level panel

### 8. Secure Fence Panels

- Panels must be attached to end, gate, and corner post with one fastener per panel
- To prevent unauthorized panel removal, you can attach one end of each panel into the post with one fastener
- Never attach both ends of a panel to posts

### 9. Cutting Panels *(if required)*

- Remove steel stiffeners from panel
- Determine distance between posts from inside of channel to inside of channel
- Cut stiffeners to that width
- Measure and mark panel  $\frac{1}{2}$ " shorter than stiffeners (this is needed for expansion and contraction of panel)
- Cut panel

*NOTE: 6 ft panel includes vertical steel insert in center of panel*

### 10. Gate Openings

- Post spacing is critical. The ideal spacing is 1" on latch post and  $1\frac{1}{2}$ " between hinge post
- Hinges should be attached to a gate post

### 11. Gate Installation

- First, attach striker bar to gate using provide button head screws
- Thread the  $\frac{1}{2}$ " hinge rod into the upper and lower inserts in the metal gate frame leaving approximately  $1\frac{1}{2}$ " from the edge of the gate to the bracket
- Determine proper height for gate and block up gate square with fence
- Attach hinges to gate post with  $2\frac{1}{2}$ " self-tapping screws provided (do not over tighten screws as this can crush the internal foam and make an indentation in the post)
- Level the gate
- Align the latch with the striker bar and attach the latch to end post with  $2\frac{1}{2}$ " self-tapping screws provided

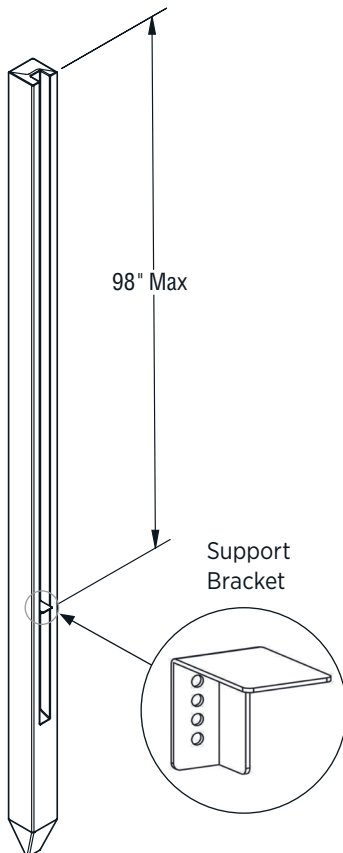
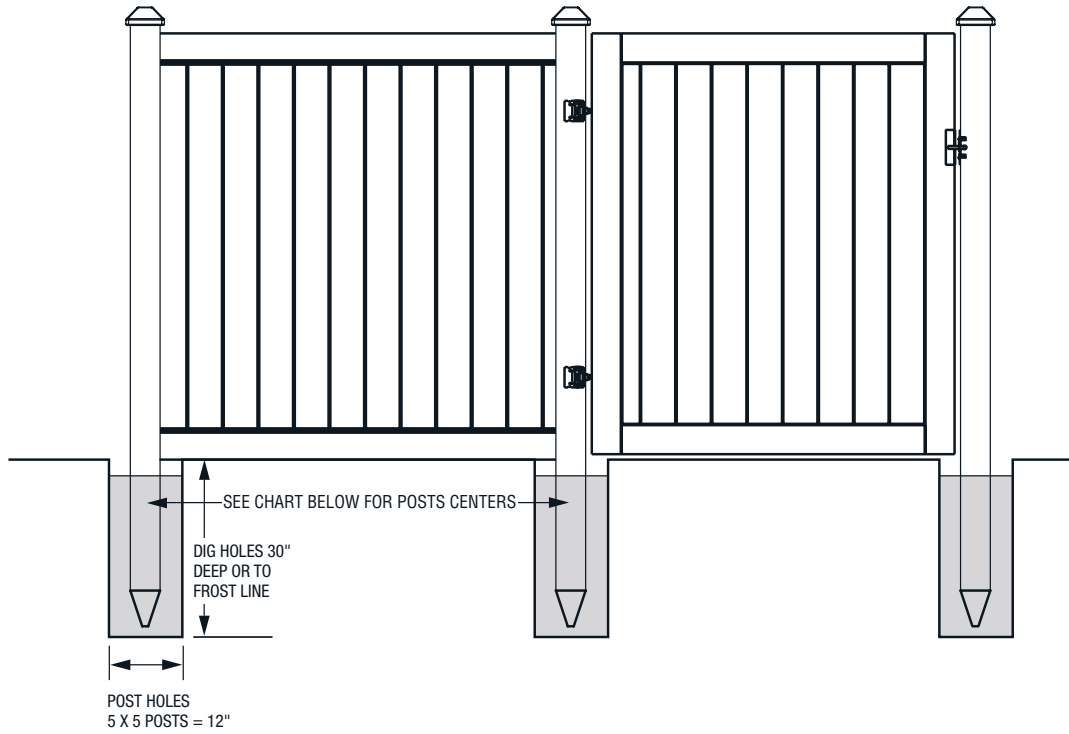
### 12. Install Caps

- Install post caps (caps are pressure fit, however a 3" deck screw can be driven through the top of the cap into the middle of the post if desired)



# Privacy Fence

*Simtek Sherwood 4' and 6' High*



Panel Size	4'	6'	8'
Bracket Location from top of post	50"	74"	98"

Center to Center Post Dimensions for 6'

		Line	Corner	End	Gate
6'x6'	Line	72"	73"	72"	73"
	Corner		74"	73"	74"
4'x8'	Line	96"	97"	96"	97"
	Corner		98"	97"	98"

# Privacy Fence

## Simtek Sherwood 8' High

### 1. Getting Started

- Be sure to call underground (811) prior to digging
- Determine gate location(s)
- Stake out the fence line
- Space and mark post hole locations for gate and sections (spacer bar/template may be useful)
- Start at an end, gate, or corner post and work outward to determine proper fence height relative to ground. If there is a slope it is easier to begin at the top end and work your way downhill

### 2. Dig Holes

- Dig holes 48" deep
  - Hole size for 5x5 posts = approximately 12"
- Clean holes and check for straight walls
- Bell bottom of holes

### 3. Install Panel Brackets

*Note: Brackets come attached to the tip of fence posts*

- Determine height of bracket from top of post
- Attach bracket to post with #14 hex washer head self-tapping screw

*Note: Put the screw through the hole as close to the top as you are able*

- A template can speed attachment for level installations

### 4. Cutting Down Posts (if required)

- Measure height from top of post
- Cut off bottom of post with metal cutting blade
- Never cut the top of the post

### 5. Setting Posts

- Insert post and hole
- Determine rough height
- Fill hole around post with concrete mix (sand, gravel and cement) approximately 2" or 4" below grade
- Tamp concrete in hole to eliminate air pockets
- Level and square post

### 6. Spacing Posts

- Use steel stiffener from panel (95" – 8')
- Place stiffener between posts
- Set post (leave spacer in place for one hour minimum)
- Set 3 to 4 posts with stiffeners as spacers, then advance them one at a time starting with the first stiffener

### 7. Install Bottom Fence Panels

- Check to ensure top and bottom rails have stiffeners. They come installed, however may have been removed to use as spacers when setting posts
- Lift panel and insert into post channels
- Ease panel down onto panel brackets
- Level panel

*Note: Be certain that the 2" high rail is on top of the bottom panel*

### 8. Install Top Panel

- Lift panel and insert into post channels
- Ease panel down onto bottom panel

*Note: Be certain the 2" high rail is on the bottom of the top panel*

**Pro Tip: When installing panels, insert a short piece of 1 $\frac{3}{8}$ " pipe into both ends of the panel to use as handles. 2x6 wood blocks can be used to support panel while lowering.**

### 9. Secure Fence Panels

- Panels must be attached to end and gate post with one fastener per panel
- To prevent unauthorized panel removal, you can attach one end of each panel into the post with one fastener
- Never attach both ends of a panel to posts

### 10. Cutting Panels (if required)

- Remove steel stiffeners from panel
- Determine distance between posts from inside of channel to inside of channel
- Cut stiffeners  $\frac{1}{4}$ " shorter than that measurement
- Measure and mark panel  $\frac{1}{4}$ " shorter than stiffeners (this is needed for expansion and contraction of panel)
- Cut panel
- A cut panel bracket is required on top and bottom cut panels

**Pro Tip: Pinning the cut panel bracket in place will help with installation (#12x1" pan head screw is recommended)**

### 11. Gate Openings

- Post spacing is critical. The ideal spacing is 1" on latch post and 1 $\frac{1}{2}$ " between hinge post
- Hinges should be attached to a gate post

### 12. Gate Installation

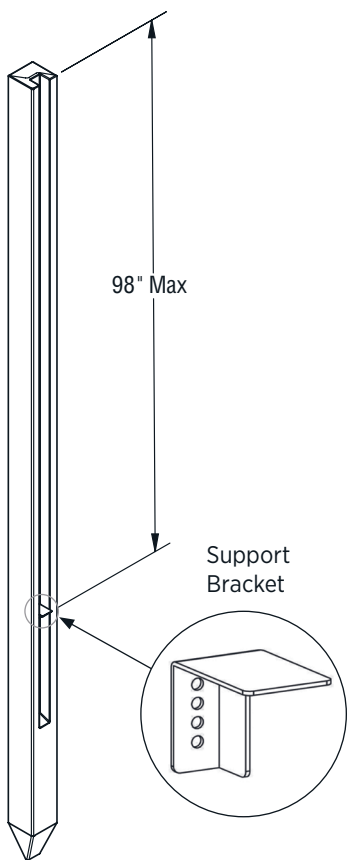
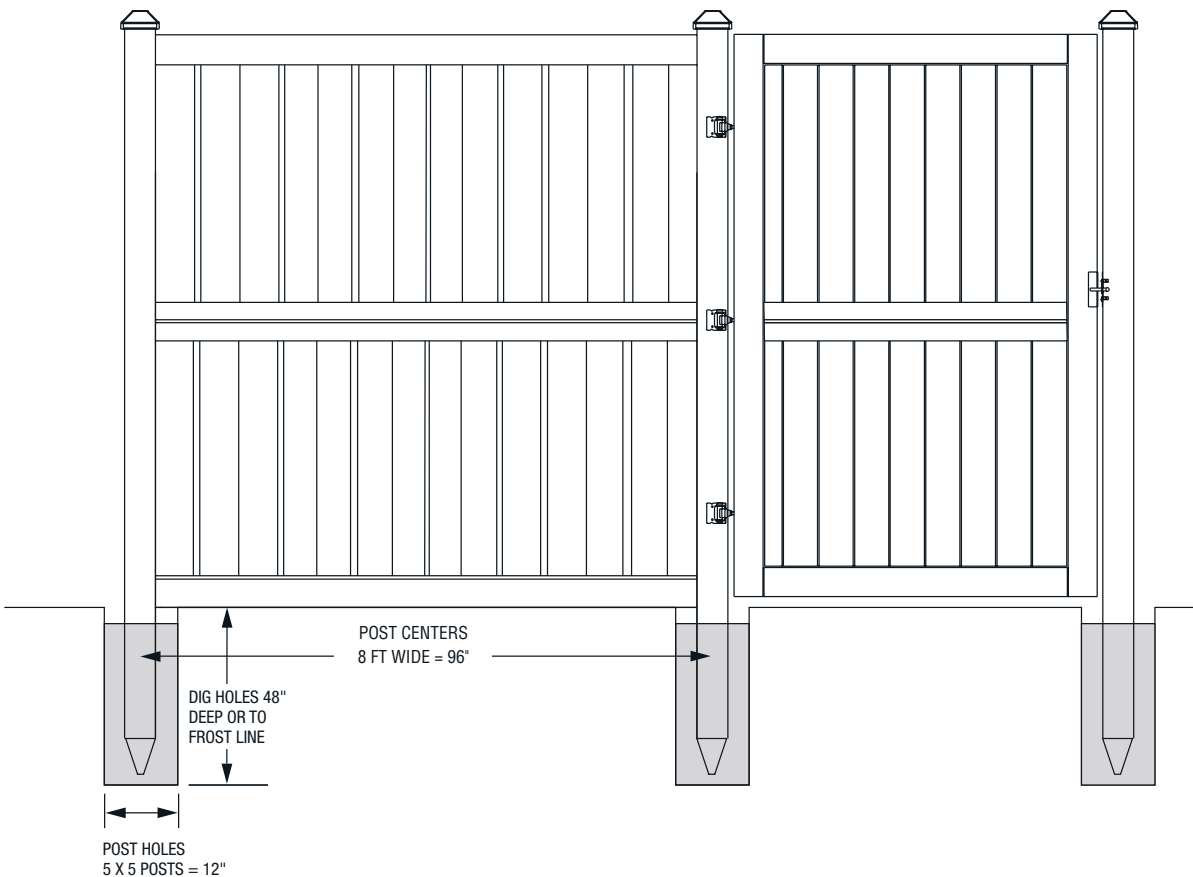
- First, attach striker bar to gate using provide button head screws
- Thread the  $\frac{1}{2}$ " hinge rod into the upper and lower inserts in the metal gate frame leaving approximately 1 $\frac{1}{2}$ " from the edge of the gate to the bracket.
- Determine proper height for gate and block up gate square with fence
- Attach hinges to gate post with 2 $\frac{1}{2}$ " self-tapping screws provided (do not over tighten screws as this can crush the internal foam and make an indentation in the post)
- Level the gate
- Align the latch with the striker bar and attach the latch to end post with 2 $\frac{1}{2}$ " self-tapping screws provided

### 13. Install Caps

- Install post caps (caps are pressure fit, however a 3" deck screw can be driven through the top of the cap into the middle of the post if desired)

# Privacy Fence

*Simtek Sherwood 8' High*



Panel Size	4'	6'	8'
Bracket Location from top of post	50"	74"	98"

# Privacy Fence

Bufftech Brookline, Brookline with TimberGrain

## 1. Getting Started

- Be sure to call underground (811) prior to digging
- Assemble gates (if necessary) and decide where they will be located
- Stake out the fence line
- Space and mark post hole locations for gate and sections (spacer bar/template may be useful)
- Start at gate end post and work outward to determine proper fence height relative to ground

## 2. Dig Holes

- Dig holes 30" deep or to frost line
  - Hole size for 5x5 posts = approximately 12"
- Clean holes and check for straight walls
- Bell bottom of holes

## 3. Install First Post

- Insert post in hole
- Determine rough height
- Fill hole around post with concrete mix (sand, gravel and cement) approximately 2" or 4" below grade
- Tamp concrete in hole to eliminate air pockets
- Level and square post

## 4. Install Bottom Rail

- Tape the ends of any rail going into a post that is to be filled with concrete to prevent concrete seepage
- Insert lock ring in both ends of bottom rail
- Depress lock ring tabs, insert bottom rail in post
- Tabs will recoil to hold rail in post

## 5. Install Second Post

- Insert second post in hole
- Insert bottom rail in post
- Insert block under bottom rail to position of correct fence height
- Fill hole around second post with concrete mix
- Tamp, level and square fence
- Assembly may be continued by installing all bottom rails first or one section at a time

## 6. Support and Secure

- Level and square fence
- To lower a post, place a wood block from corner to corner of the post and carefully tap with a mallet
- Never strike the PVC post without a wood support

## 7. Picket End Channel

- Cut end channel to length
- Center channel on post between routed holes
- Attach channel to post in four locations

## 8. Install Pickets and Rails

- Insert first picket in end channels and bottom rail with the groove down
- Insert remaining pickets into channel with the groove down
- Insert top rail over last picket
- Depress lock ring tabs, insert top rail in post

*Note: Alternating grooves up and down will cause inconsistent lines between sections*

## 9. Hang Gate/Install Hardware

- For complete details, see gate installation instructions in hardware box
- Position gate between posts
- Allow 1" gap for hinge and ¾" for latch and gate swing
- Block up gate to square with fence; rails should be level
- Gate hardware must be secured to two sides of the post

## 10. Solidify Gate Posts

- It is critical that gate hinge and latch posts are solid to ensure proper gate functionality. Two methods are available:

### a. Aluminum gate post stiffener

- Slide aluminum gate stiffener inside hinge, latch or end posts
- Drive a screw through the vinyl into the aluminum stiffener at the bottom of the post
- Insert post into the ground
- Fill hole with concrete around outside of post

### b. Concrete and rebar\*

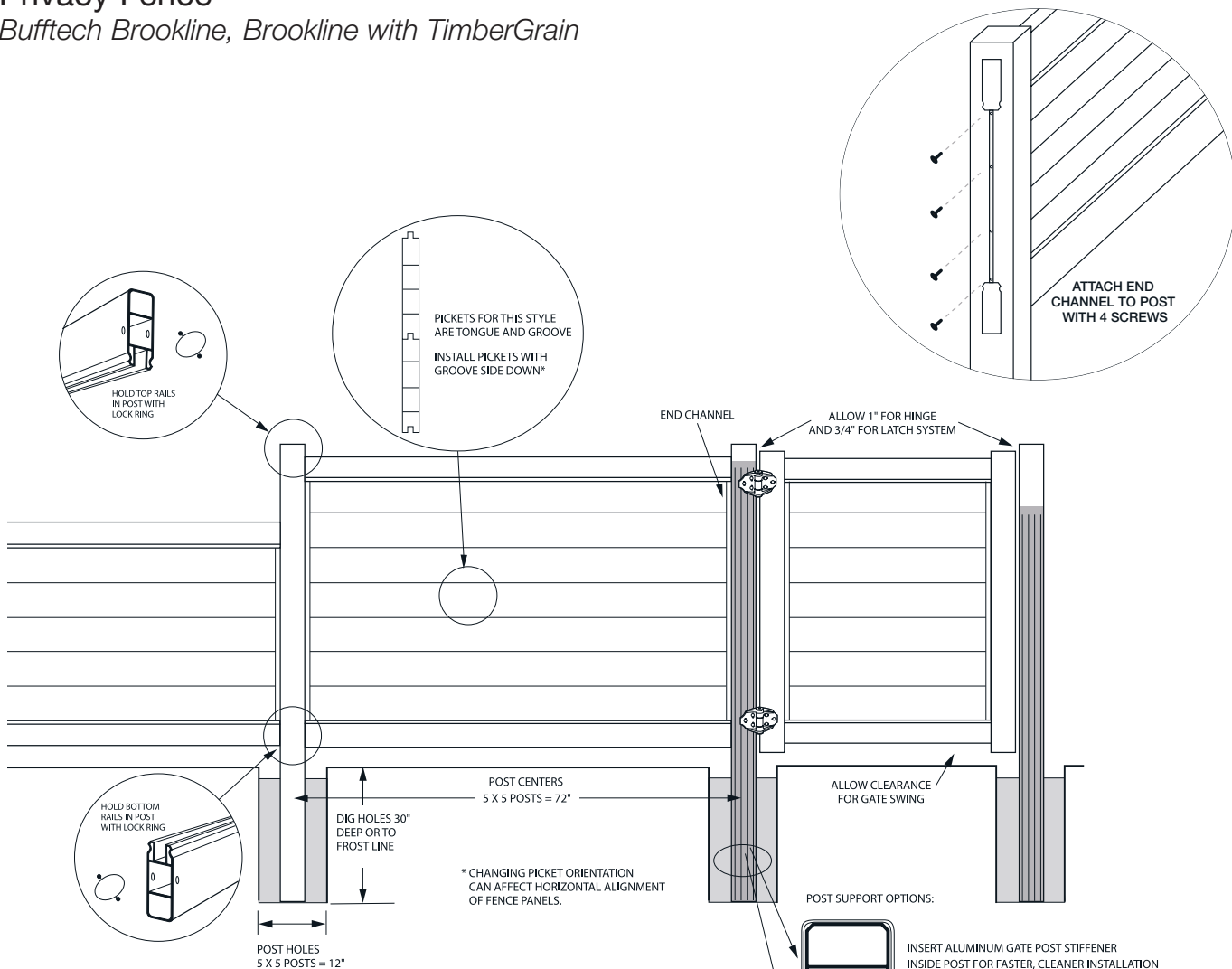
- Use two pieces of ½" rebar in each hinge, latch and end post
- Rebar should extend from the bottom of the hole to approximately 12" from the top of the post
- Hold rebar in opposite corners of post with rebar separator clips
- Fill post with concrete mix to cover rebar and hardware fasteners
- Tamp post with a rubber mallet to eliminate air pockets
- Leave gate on blocks for 72 hours to allow concrete to set

## 11. Install Caps

- Install post caps
- Caps may be secured with glue, silicone adhesive or #8 x ¾" screws, caps and washers

# Privacy Fence

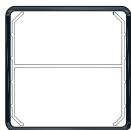
Bufftech Brookline, Brookline with TimberGrain



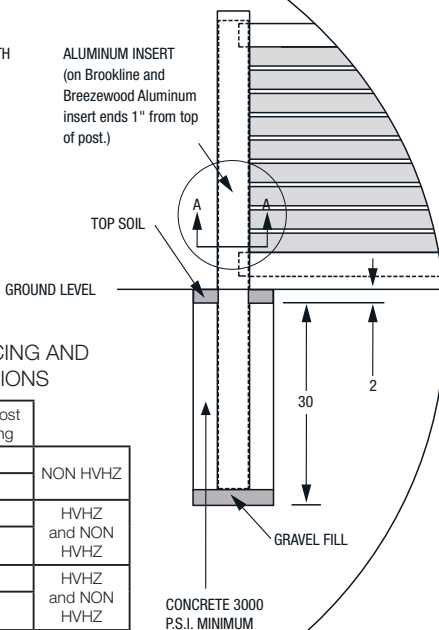
## EMBEDMENT DETAIL FOR OPTIONAL LINE POST STIFFENER ALUMINUM INSERT

MINIMUM 106" INSERT REQUIRED TO COMPLY WITH THE HIGH VELOCITY HURRICANE ZONES SECTION R44003.1.2.1 OF THE FLORIDA BUILDING CODE

ALUMINUM INSERT (on Brookline and Breezewood Aluminum insert ends 1" from top of post.)



SECTION A-A LINE POST STIFFENER ALUMINUM INSERT



## MAXIMUM POST SPACING AND FOOTING DIMENSIONS

Wind Exposure	Footing Depth	Max. Post Spacing	
B	30"	97"	NON HVHZ
B	24"	66"	
C	36"	88"	HVHZ and NON HVHZ
C	30"	68"	
D	36"	75"	HVHZ and NON HVHZ
D	30"	56"	

HVHZ: Miami-Dade and Broward counties wind exposures as defined in the ASCE 7-10



FEATURING WIND CODE PERFORMANCE

Stepping Recommended

# Privacy Fence

## Bufftech Chesterfield and Chesterfield with TimberGrain

### 1. Getting Started

- Be sure to call underground (811) prior to digging
- Assemble gates (if necessary) and decide where they will be located
- Stake out the fence line
- Space and mark post hole locations for gate and sections (spacer bar/template may be useful)
- Start at gate end post and work outward to determine proper fence height relative to ground

### 2. Dig Holes

- Dig holes 30" deep or to frost line
  - Hole size for 5x5 posts = approximately 12"
- Clean holes and check for straight walls
- Bell bottom of holes

### 3. Install First Post

- Insert post in hole
- Determine rough height
- Fill hole around post with concrete mix (sand, gravel and cement) approximately 2" or 4" below grade
- Tamp concrete in hole to eliminate air pockets
- Level and square post

### 4. Install Bottom Rail

- Tape the ends of any rail going into a post that is to be filled with concrete to prevent concrete seepage
- Insert lock ring in both ends of bottom rail
- Depress lock ring tabs, insert bottom rail in post
- Tabs will recoil to hold rail in post

### 5. Install Second Post

- Insert second post in hole
- Insert bottom rail in post
- Insert block under bottom rail to position of correct fence height
- Fill hole around second post with concrete mix
- Tamp, level and square fence
- Assembly may be continued by installing all bottom rails first or one section at a time

### 6. Support and Secure

- Level and square fence
- To lower a post, place a wood block from corner to corner of the post and carefully tap with a mallet
- Never strike the PVC post without a wood support

### 7. Picket End Channel

- When installing Arbor Blend, Arctic Blend, Brazilian Blend, Frontier Blend, Natural Clay, Sierra Blend, Timber Blend or Weathered Blend, picket end channels are required (2 per section)
- Cut end channel to length
- Center channel on post between routed holes

- Attach channel to post in four locations

### 8. Install Pickets and Rails

- Pickets are cut at a 5° angle to accommodate a 1' slope
- Insert pickets in bottom rail
- Insert top rail over pickets
- Depress lock ring tabs, insert top rail in post

### 9. Hang Gate/Install Hardware

- For complete details, see gate installation instructions in hardware box
- Position gate between posts
- Allow 1" gap for hinge and ¾" for latch and gate swing
- Block up gate to square with fence; rails should be level
- Gate hardware must be secured to two sides of the post

### 10. Solidify Gate Posts

- It is critical that gate hinge and latch posts are solid to ensure proper gate functionality. Two methods are available:

#### a. Aluminum gate post stiffener

- Slide aluminum gate stiffener inside hinge, latch or end posts
- Drive a screw through the vinyl into the aluminum stiffener at the bottom of the post
- Insert post into the ground
- Fill hole with concrete around outside of post

#### b. Concrete and rebar\*

- Use two pieces of ½" rebar in each hinge, latch and end post
- Rebar should extend from the bottom of the hole to approximately 12" from the top of the post
- Hold rebar in opposite corners of post with rebar separator clips
- Fill post with concrete mix to cover rebar and hardware fasteners
- Tamp post with a rubber mallet to eliminate air pockets
- Leave gate on blocks for 72 hours to allow concrete to set

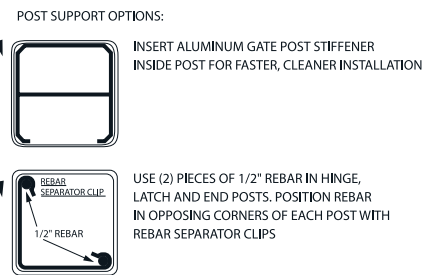
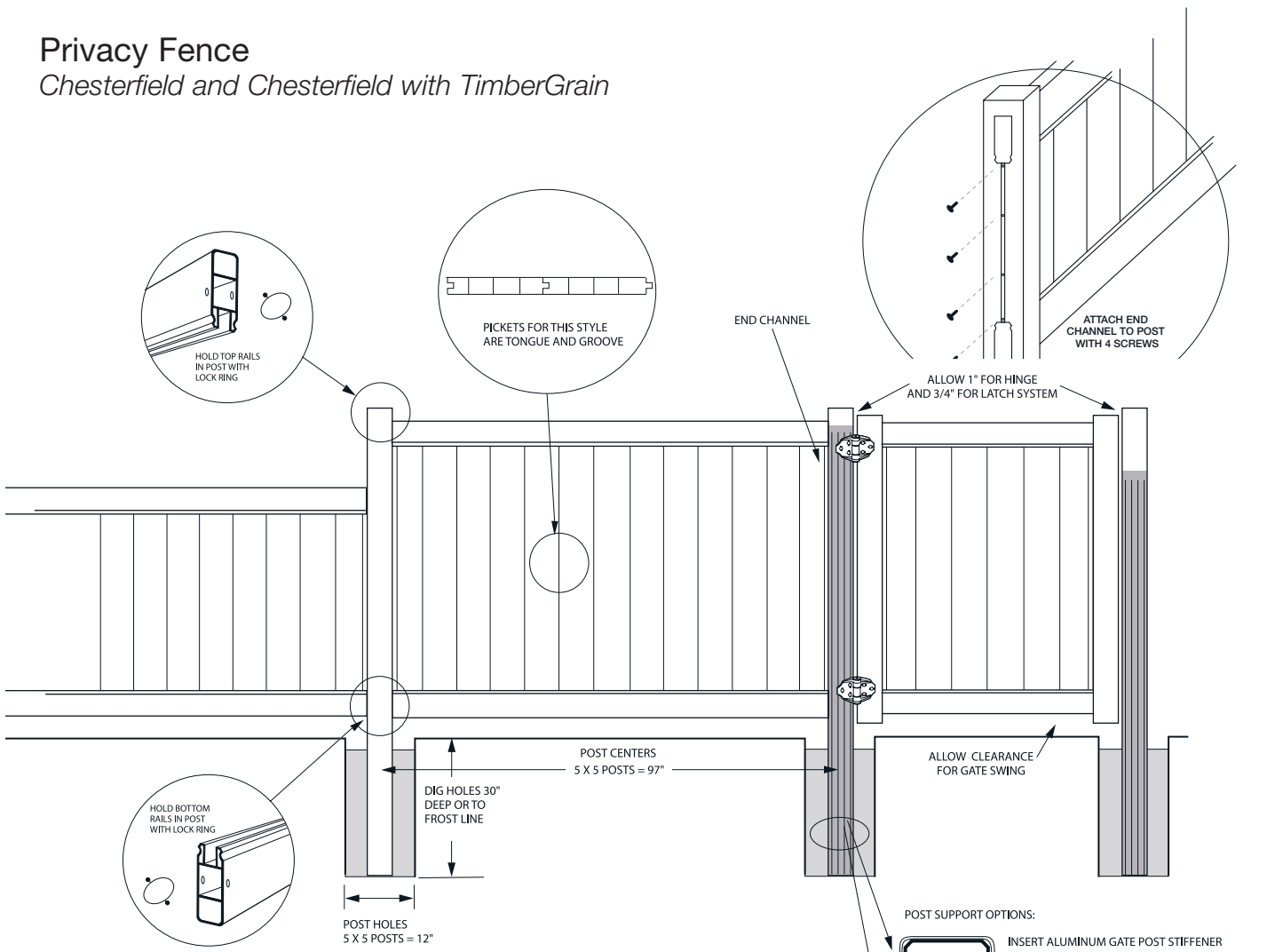
### 11. Install Caps

- Install post caps
- Caps may be secured with glue, silicone adhesive or #8 x ¾" screws, caps and washers

For accents, see page 36

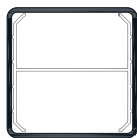
# Privacy Fence

Chesterfield and Chesterfield with TimberGrain



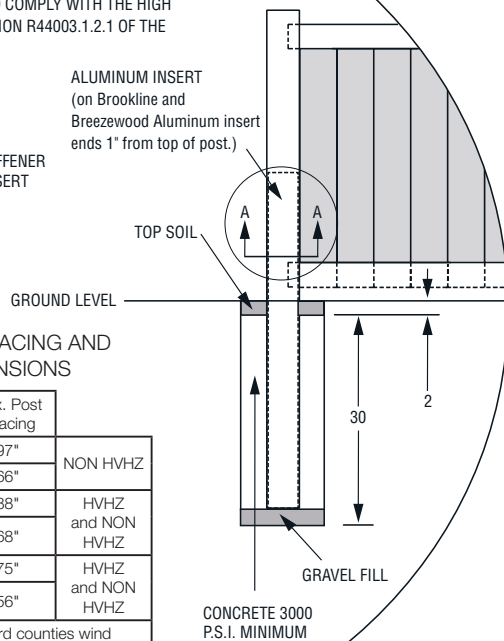
### EMBEDMENT DETAIL FOR OPTIONAL LINE POST STIFFENER ALUMINUM INSERT

MINIMUM 48" INSERT REQUIRED TO COMPLY WITH THE HIGH VELOCITY HURRICANE ZONES SECTION R44003.1.2.1 OF THE FLORIDA BUILDING CODE



SECTION A-A  
LINE POST STIFFENER  
ALUMINUM INSERT

ALUMINUM INSERT  
(on Brookline and Breezewood Aluminum insert ends 1" from top of post.)



### MAXIMUM POST SPACING AND FOOTING DIMENSIONS

Wind Exposure	Footing Depth	Max. Post Spacing	
B	30"	97"	NON HVHZ
B	24"	66"	
C	36"	88"	HVHZ and NON HVHZ
C	30"	68"	
D	36"	75"	HVHZ and NON HVHZ
D	30"	56"	

HVHZ: Miami-Dade and Broward counties wind exposures as defined in the ASCE 7-10





# Privacy Fence

*Bufftech Chesterfield with Huntington Accent, Chesterfield with Westminster Accent*

## 1. Getting Started

- Be sure to call underground (811) prior to digging
- Assemble gates (if necessary) and decide where they will be located
- Stake out the fence line
- Space and mark post hole locations for gate and sections (spacer bar/template may be useful)
- Start at gate end post and work outward to determine proper fence height relative to ground

## 2. Dig Holes

- Dig holes 30" deep or to frost line
  - Hole size for 5x5 posts = approximately 12"
- Clean holes and check for straight walls
- Bell bottom of holes

## 3. Install First Post

- Insert post in hole
- Determine rough height
- Fill hole around post with concrete mix (sand, gravel and cement) approximately 2" or 4" below grade
- Tamp concrete in hole to eliminate air pockets
- Level and square post

## 4. Install Bottom Rail

- Tape the ends of any rail being inserted into a post that is to be filled with concrete to prevent concrete seepage
- Insert lock ring in each end of rail
- Depress lock ring tabs and insert rail in post. Tabs will recoil to hold rail in post

## 5. Install Second Post

- Insert second post in hole
- Insert bottom rail in post
- Insert block under bottom rail to position at correct fence height
- Fill hole around second post with concrete mix
- Tamp, level and square fence
- Assembly may be continued by installing all bottom rails first, or one section at a time

## 6. Support and Secure

- Level and square fence
- To lower a post, place a wood block from corner to corner on the post and carefully tap with a mallet
- Never strike the PVC post without a wood support

## 7. Picket End Channel

- Cut end channel to length
- Center channel on post between routed holes
- Attach channel to post in four locations

## 8. Install Pickets and Rails

- Insert pickets in bottom rail
- Insert top rail over pickets
- Insert lock ring in each end of rail
- Depress lock rings tabs, insert top rail in post

## 9. Install Accents

- Huntington
  - Insert top 2" x 3½" rail with larger holes facing down into post
  - Insert pickets through rail and lock into top fence section rail (pickets are factory crimped to hold in place)
  - To create desired scalloped effect, longer length pickets will need to be cut and then crimped, or a bullet clip may be inserted to hold picket in rail
- Westminster
  - Insert bottom and side channels (overlap ends) into position on rail and posts - secure with #8x1½" screws
  - Insert lattice into channels
  - Slide top channel over lattice
  - Insert top 2" x 3½" rail into routed post holes
  - Secure top channel 2" x 3½" top rail with #8 x 1½" screws

## 10. Hang Gate/Install Hardware

- For complete details, see gate installation instructions in hardware box
- Position gate between posts
- Allow 1" gap for hinge and ¾" for latch and gate swing
- Block up gate to square with fence; rails should be level
- Gate hardware must be secured to two sides of the post

## 11. Solidify Gate Posts

- It is critical that gate hinge and latch posts are solid to ensure proper gate functionality. Two methods are available:
  - a. Aluminum gate post stiffener**
    - Slide aluminum gate stiffener inside hinge, latch or end posts
    - Drive a screw through the vinyl into the aluminum stiffener at the bottom of the post
    - Insert post into the ground
    - Fill hole with concrete around outside of post
  - b. Concrete and rebar\***
    - Use two pieces of ½" rebar in each hinge, latch and end post
    - Rebar should extend from the bottom of the hole to approximately 12" from the top of the post
    - Hold rebar in opposite corners of post with rebar separator clips
    - Fill post with concrete mix to cover rebar and hardware fasteners
    - Tamp post with a rubber mallet to eliminate air pockets
    - Leave gate on blocks for 72 hours to allow concrete to set

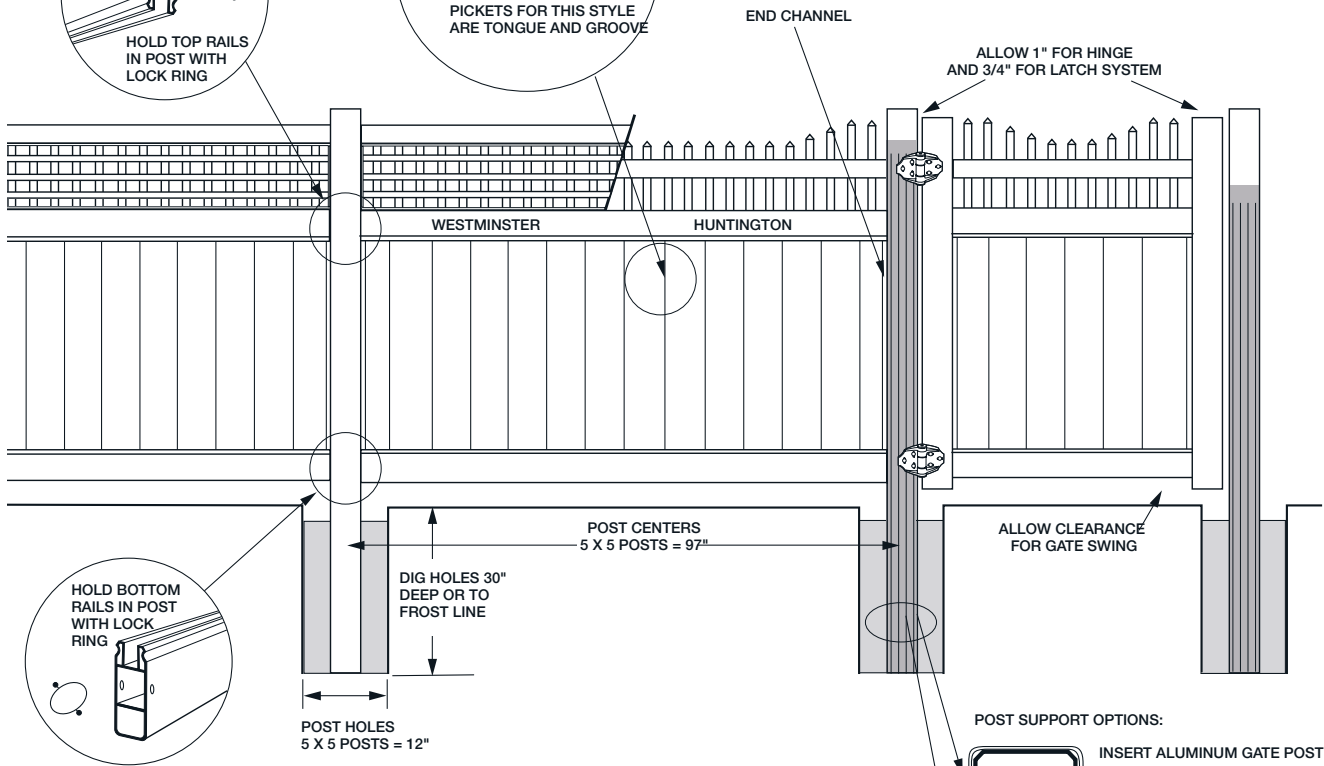
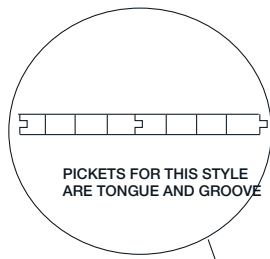
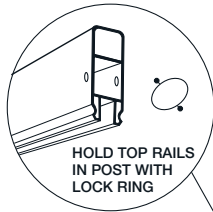
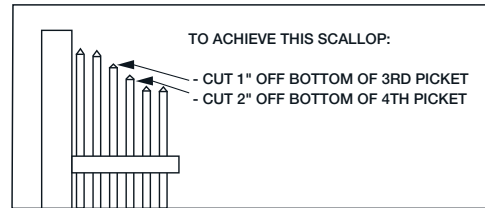
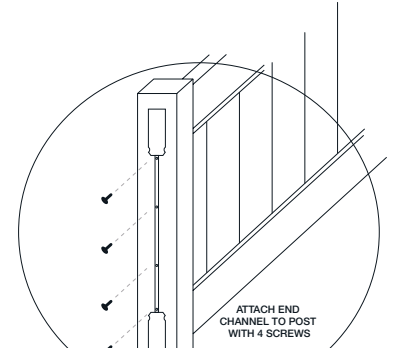
## 12. Install Caps

- Install post caps
- Caps may be secured with glue, silicone adhesive or #8 x ¾" screws, caps and washers

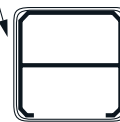


# Privacy Fence

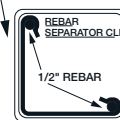
*Bufftech Chesterfield with Huntington Accent and Chesterfield with Westminster Accent*



**POST SUPPORT OPTIONS:**



INSERT ALUMINUM GATE POST STIFFENER INSIDE POST FOR FASTER, CLEANER INSTALL



USE (2) PIECES OF 1/2" REBAR IN HINGE, LATCH AND END POSTS. POSITION REBAR IN OPPOSING CORNERS OF EACH POST WITH REBAR SEPARATOR CLIPS

# Privacy Fence

*Bufftech Galveston, Galveston with TimberGrain*

## 1. Getting Started

- Be sure to call underground (811) prior to digging
- Assemble gates (if necessary) and decide where they will be located
- Stake out the fence line
- Space and mark post hole locations for gate and sections (spacer bar/template may be useful)
- Start at gate end post and work outward to determine proper fence height relative to ground

## 2. Dig Holes

- Dig holes 30" deep or to frost line
  - Hole size for 5x5 posts = approximately 12"
- Clean holes and check for straight walls
- Bell bottom of holes

## 3. Install First Post

- Insert post in hole
- Determine rough height
- Fill hole around post with concrete mix (sand, gravel and cement) approximately 2" or 4" below grade
- Tamp concrete in hole to eliminate air pockets
- Level and square post

## 4. Install Bottom Rail

- Tape the ends of any rail going into a post that is to be filled with concrete to prevent concrete seepage
- Insert lock ring in each end of rail
- Depress lock ring tabs, insert bottom rail in post
- Tabs will recoil to hold rail in post

## 5. Install Second Post

- Insert second post in hole
- Insert bottom rail in post
- Insert block under bottom rail to position at correct fence height
- Fill hole around second post with concrete mix
- Tamp, level and square fence
- Assembly may be continued by installing all bottom rails first or one section at a time

## 6. Support and Secure

- Level and square fence
- To lower a post, place a wood block from corner to corner of the post and carefully tap with a mallet
- Never strike the PVC post without a wood support

## 7. Picket End Channel

- When installing Arbor Blend, Arctic Blend, Brazilian Blend, Frontier Blend, Natural Clay, Sierra Blend or Weathered Blend, picket end channels are required (4 per section)
- Cut end channel to length
- Center channel on post between routed holes
- Attach channel to post in four locations

## 8. Install Pickets and Rails

- Insert pickets in bottom rail

- Insert mid-rail over pickets
- Insert lock ring in each end of rail
- Depress lock ring tabs, insert mid-rail in post
- Insert next row of pickets in mid-rail
- Insert top rails over pickets
- Insert lock ring in each end of rail
- Depress lock ring tabs, insert top rail in post

## 9. Hang Gate/Install Hardware

- Position gate between posts
- Allow 1" gap for hinge and ¾" for latch and gate swing
- Block up gate to square with fence; rails should be level
- Gate hardware must be secured to two sides of the post
- For complete details, see gate installation instructions in hardware box
- Galveston gate requires 3 hinges

## 10. Solidify Gate Posts

- It is critical that gate hinge and latch posts are solid to ensure proper gate functionality. Two methods are available:
  - a. Aluminum gate post stiffener**
    - Slide aluminum gate stiffener inside hinge, latch or end posts
    - Drive a screw through the vinyl into the aluminum stiffener at the bottom of the post
    - Insert post into the ground
    - Fill hole with concrete around outside of post
  - b. Concrete and Rebar\***
    - Use two pieces of ½" rebar in each hinge, latch and end post
    - Rebar should extend from the bottom of the hole to approximately 12" from the top of the post
    - Hold rebar in opposite corners of post with rebar separator clips
    - Fill post with concrete mix to cover rebar and hardware fasteners
    - Tamp post with a rubber mallet to eliminate air pockets
    - Leave gate on blocks for 72 hours to allow concrete to set

## 11. Reinforce Posts (two methods)

### a. Aluminum Line Post Insert

- Length of aluminum insert should extend from bottom of posts to 4" below mid-rail

### b. Concrete and Rebar\*

- Insert two pieces of rebar in all end, line and corner posts. Fill with concrete mix to cover rebar at a height 1" below mid-rail
- Tamp post with a rubber mallet to eliminate air pockets

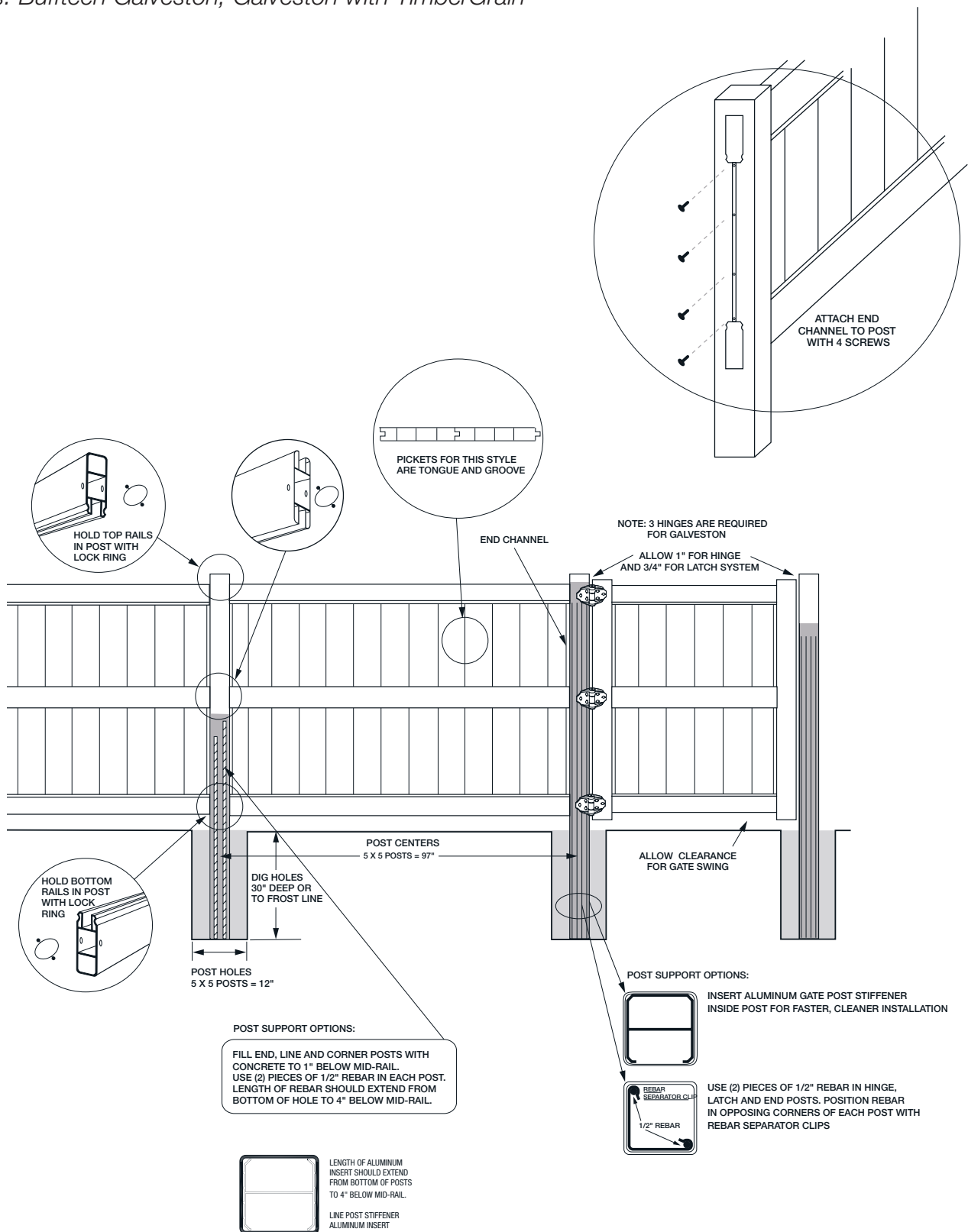
Note: Corner posts should be reinforced with concrete and rebar.

## 12. Install Caps

- Install post caps
- Caps may be secured with glue, silicone adhesive or #8 x ¾" screws, caps and washers

# Privacy Fence

Includes: Bufftech Galveston, Galveston with TimberGrain



For accents, see page 36

## Accent Fence

### *Victorian/Spindle and Lattice*

Once the main fence section is installed, proceed as follows:

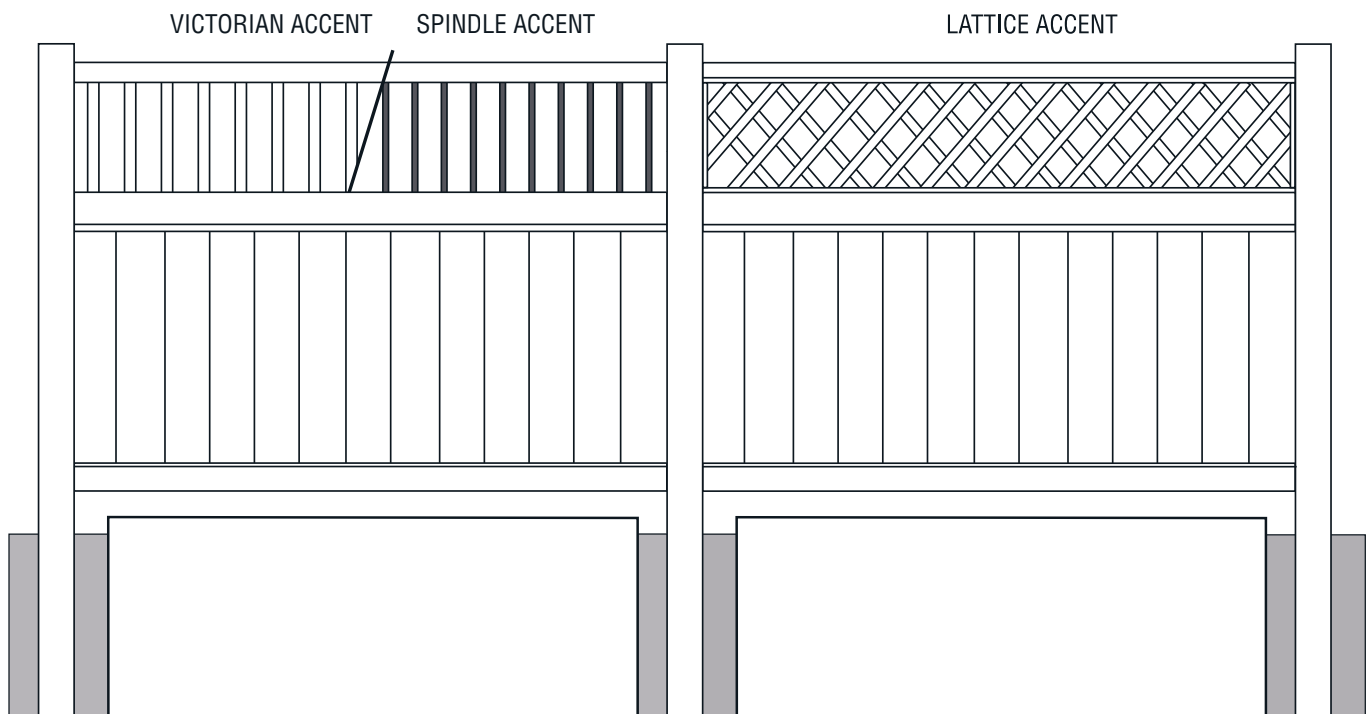
#### Victorian/Spindle

- Insert accent pickets in routed section top rail
- Insert top accent rail over pickets
- Insert both ends of top rail into routed post holes
- Secure top rail in position with #8 x 3/4" screws from inside the post

#### Lattice

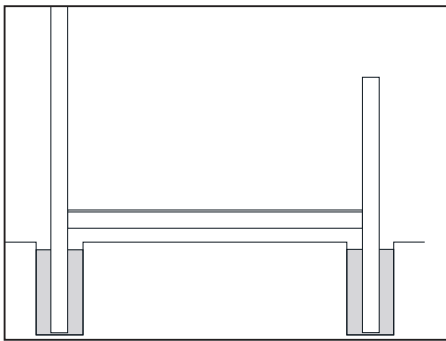
- Measure distance between inside faces of the posts
- Cut bottom channel to fit between posts
- Fasten bottom channel to top fence rail with #8 x 1 1/2" screws evenly spaced along the length
- Fasten side channels to posts with #8x 1 1/2" screws
- Insert lattice into channels
- Slide top channel over lattice
- Insert top 2" x 3 1/2" rail into routed post holes
- Secure top channel to 2" x 3 1/2" top rail with #8 x 1 1/2" screws evenly spaced along the length

SHOWN WITH CHESTERFIELD FENCE

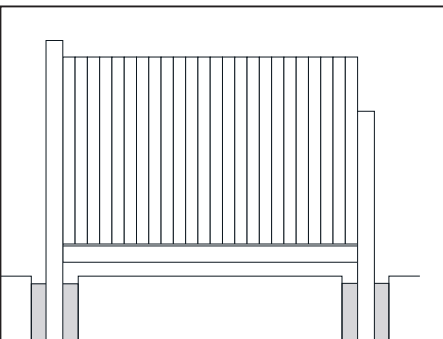


## Curved Rail

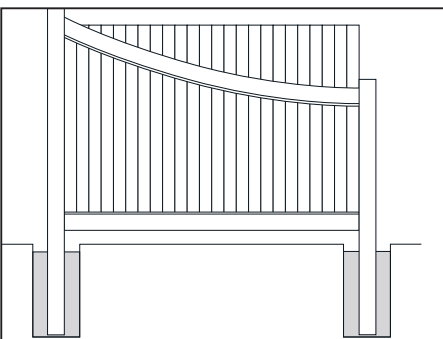
*Concave, Convex, "S" Curve and Swoop*



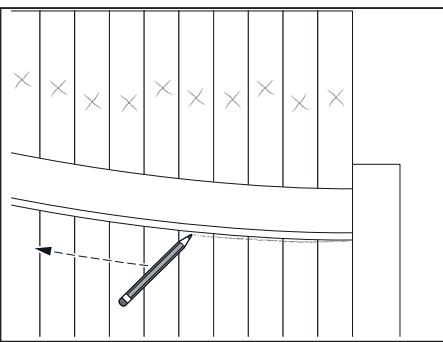
1. Set Posts



2. Insert Pickets in Bottom Rail



3. Insert Top Rail into Post Holes

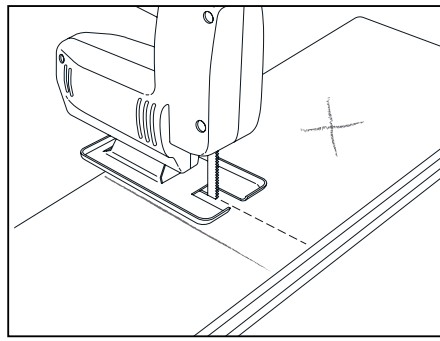


4. Trace the Outline of the Rail onto the Pickets

- Mark each picket with an X on the scrap side of the line
- Numbering pickets will help when reinstalling them

## Curved Rail

*Concave, Convex, "S" Curve and Swoop*

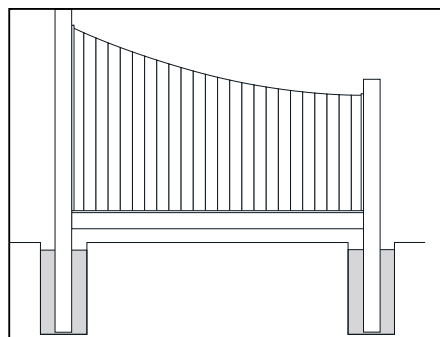


5. Cut Pickets

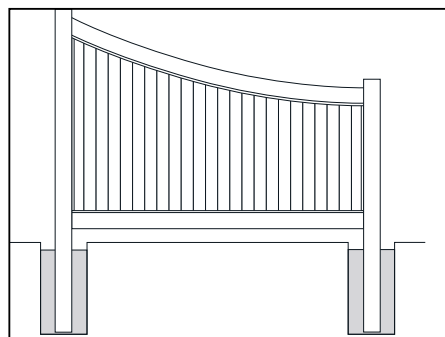
- Remember to wear safety glasses when cutting
- Use pencil line as guide only — DO NOT CUT ALONG PENCIL LINE
- Blade should cut approximately 1¼" above the line to allow picket to enter rail
- To practice safety, remove pickets and cut on a flat, secure surface

6. Picket End Channel

- Cut end channel to length
- Center channel on post between routed holes
- Attach channel to post in four locations



7. Insert Pickets into Bottom Rail



8. Slide Top Rail over Pickets

9. Insert Locking Rings

10. Insert Rail into Post Holes

# Post & Rail

## Crossbuck, 2 Rail, 3 Rail and 4 Rail

### 1. Getting Started

- Be sure to call underground (811) prior to digging
- Assemble gates (if necessary) and decide where they will be located
- Stake out the fence line
- Space and mark post hole locations for gate and sections (spacer bar/template may be useful)
- Start at gate end post and work outward to determine proper fence height relative to ground

### 2. Dig Holes

- Dig holes 30" deep or to frost line
  - Hole size for 5x5 posts = approximately 12"
- Clean holes and check for straight walls
- Bell bottom of holes

### 3. Install First Post

- Insert post in hole
- Determine rough height
- Fill hole around post with concrete mix (sand, gravel and cement) approximately 2" or 4" below grade
- Tamp concrete in hole to eliminate air pockets
- Level and square post
- Fence may be installed post and bottom rails first, then upper rails

### 4. Install Rails

- Tape the ends of any rail going into a post that is to be filled with concrete to prevent concrete seepage
- Standard rails are supplied in 16 foot lengths
- For rolling terrain, rails may need to be cut to 95½"
- The starting point for rails should be staggered from post to post for bottom/mid/top rail for maximum strength
- Insert lock ring into one end of rail by depressing tabs, insert in rail end and release
- Depress lock ring tabs to insert bottom rail in first post
- Tabs will recoil to hold rail in post
- If bottom rail is 16' long, slide rail through second post and then insert post in ground
- Insert lock ring in rail end, insert end into third post
- When installing rails leave a 1" gap between rail ends inside post to allow for expansion

### 5. Support and Secure

- Block up bottom rail to determine correct fence height
- Fill holes around posts with concrete mix
- Tamp, level and square
- Fence assembly may be continued by installing all bottom rails first or one section at a time
- To lower a post, place a wood block from corner to corner of the post and carefully tap with a mallet

- Never strike the PVC post without a wood support

### 6. Crossbuck

- Insert lock rings in diagonal rails and insert into each post

*Note: Standard diagonal rails are cut to 97" to compensate for angle of install*

### 7. Hang Gate/Install Hardware

- For complete details, see gate installation instructions in hardware box
- Position gate between posts
- Allow 1½" gap on hinge side of the gate and 1¼" on latch side to allow for the gate swing and hardware
- Block up gate to square with fence; rails should be level
- Gate hardware must be secured to two sides of the post

### 8. Solidify Gate Posts

- It is critical that gate hinge and latch posts are solid to ensure proper gate functionality. Two methods are available:

#### a. Aluminum gate post stiffener

- Slide aluminum gate stiffener inside hinge, latch or end posts
- Drive a screw through the vinyl into the aluminum stiffener at the bottom of the post
- Insert post into the ground
- Fill hole with concrete around outside of post

#### b. Concrete and rebar\*

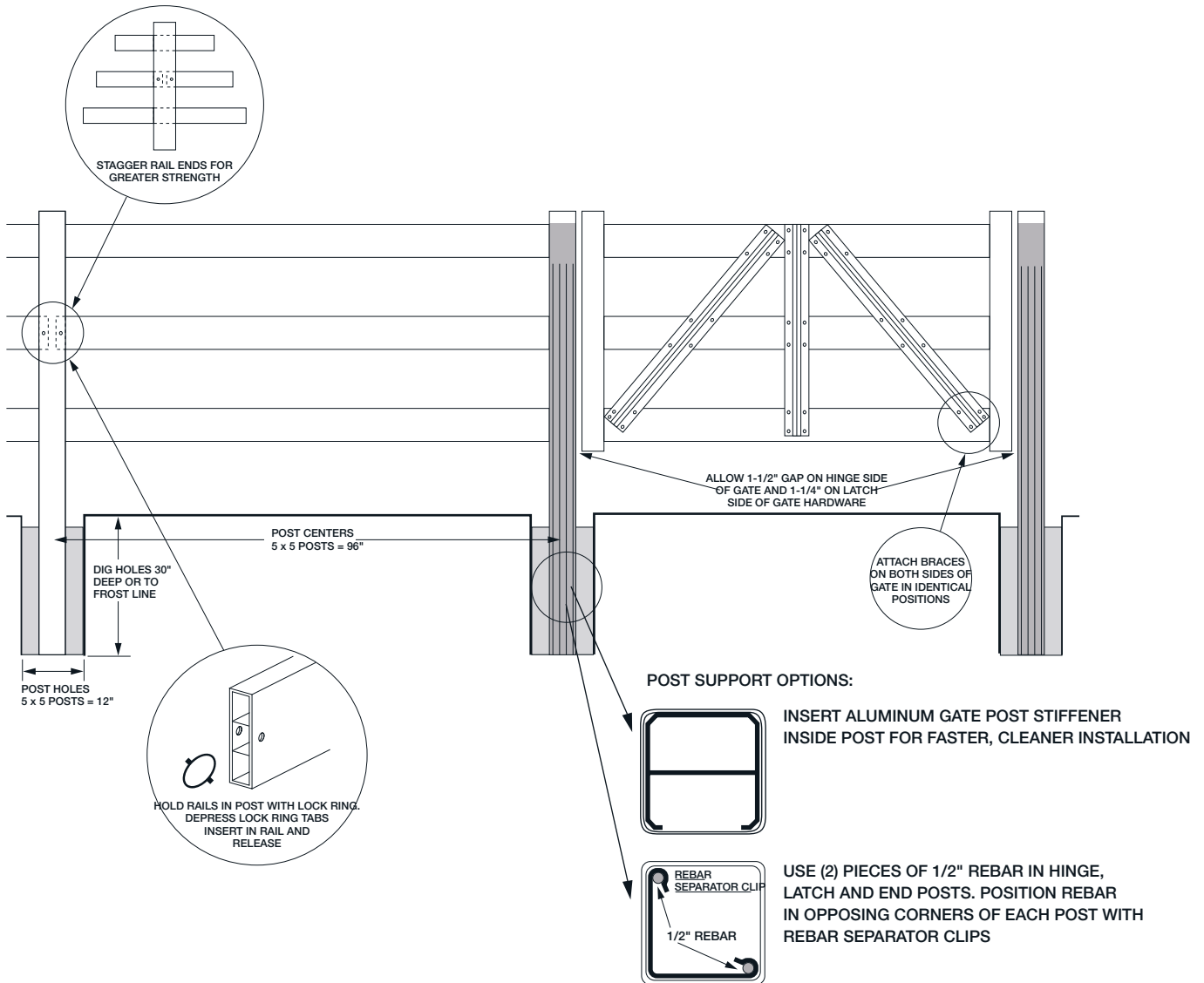
- Use two pieces of ½" rebar in each hinge, latch and end post
- Rebar should extend from the bottom of the hole to approximately 12" from the top of the post
- Hold rebar in opposite corners of post with rebar separator clips
- Fill post with concrete mix to cover rebar and hardware fasteners
- Tamp post with a rubber mallet to eliminate air pockets
- Leave gate on blocks for 72 hours to allow concrete to set

### 9. Install Caps

- Install post caps
- Caps may be secured with glue, silicone adhesive or #8 x¾" screws, caps and washers

# Post & Rail Fence

Crossbuck, 2 Rail, 3 Rail and 4 Rail



# Post & Rail with TimberGrain

## 2 Rail, 3 Rail and 4 Rail

### 1. Getting Started

- Be sure to call underground (811) prior to digging
- Assemble gates (if necessary) and decide where they will be located
- Stake out the fence line
- Space and mark post hole locations for gate and sections (spacer bar/template may be useful)
- Start at gate end post and work outward to determine proper fence height relative to ground

### 2. Dig Holes

- Dig holes 30" deep or to frost line
  - Hole size for 5x5 posts = approximately 12"
- Clean holes and check for straight walls
- Bell bottom of holes

### 3. Install First Post

- Insert post in hole
- Determine rough height
- Fill hole around post with concrete mix (sand, gravel and cement) approximately 2" or 4" below grade
- Tamp concrete in hole to eliminate air pockets
- Level and square post
- Fence may be installed post and bottom rails first, then upper rails

### 4. Install Rails

- Arctic Blend, Brazilian Blend, Sierra Blend and Weathered Blend use 2 x 6 rails
- Tape the ends of any rail going into a post that is to be filled with concrete to prevent concrete seepage
- For rolling terrain, rails may need to be shortened
- The starting point for rails should be staggered from post to post for bottom/mid/top rail for maximum strength
- Insert lock ring into one end of rail by depressing tabs, insert in rail end and release
- Depress lock ring tabs to insert bottom rail in first post
- Tabs will recoil to hold rail in post
- Insert lock ring in rail end, insert end into third post
- When installing rails leave a 1" gap between rail ends inside post to allow for expansion

### 5. Support and Secure

- Block up bottom rail to determine correct fence height
- Fill holes around posts with concrete mix
- Tamp, level and square
- Fence assembly may be continued by installing all bottom rails first or one section at a time
- To lower a post, place a wood block from corner to corner of the post and carefully tap with a mallet
- Never strike the PVC post without a wood support

### 6. Hang Gate/Install Hardware

- For complete details, see gate installation instructions in hardware box
- Position gate between posts
- Allow 1½" gap on hinge side of the gate and 1¼" on latch side to allow for the gate swing and hardware
- Block up gate to square with fence; rails should be level
- Gate hardware must be secured to two sides of the post

### 8. Solidify Gate Posts

- It is critical that gate hinge and latch posts are solid to ensure proper gate functionality. Two methods are available:

#### a. Aluminum gate post stiffener

- Slide aluminum gate stiffener inside hinge, latch or end posts
- Drive a screw through the vinyl into the aluminum stiffener at the bottom of the post
- Insert post into the ground
- Fill hole with concrete around outside of post

#### b. Concrete and rebar\*

- Use two pieces of ½" rebar in each hinge, latch and end post
- Rebar should extend from the bottom of the hole to approximately 12" from the top of the post
- Hold rebar in opposite corners of post with rebar separator clips
- Fill post with concrete mix to cover rebar and hardware fasteners
- Tamp post with a rubber mallet to eliminate air pockets
- Leave gate on blocks for 72 hours to allow concrete to set

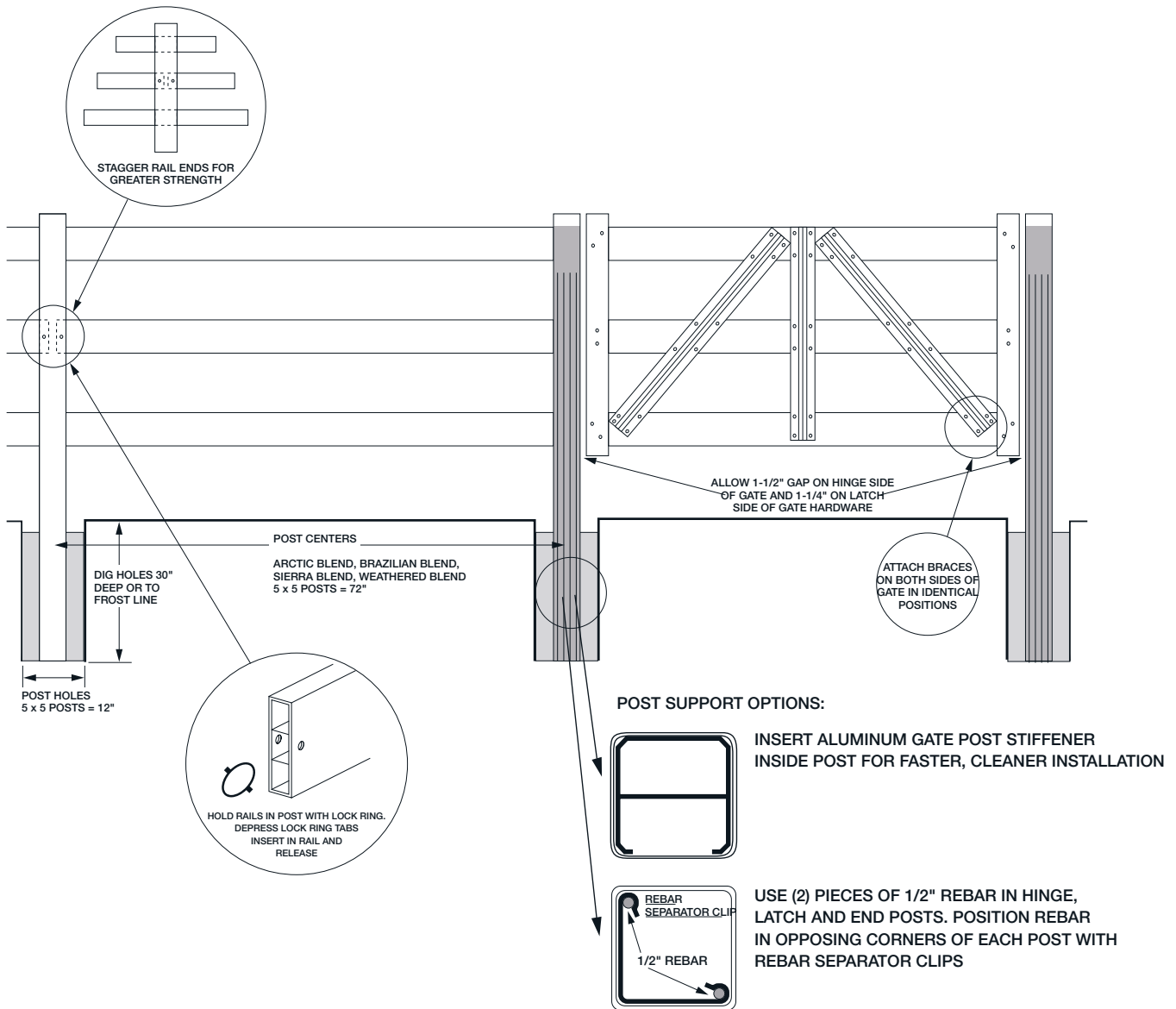
### 9. Install Caps

- Install post caps
- Caps may be secured with glue, silicone adhesive or #8 x ¾" screws, caps and washers



# Post & Rail with TimberGrain® Texture

## 2-Rail, 3-Rail and 4-Rail



# Variable Terrain Installation

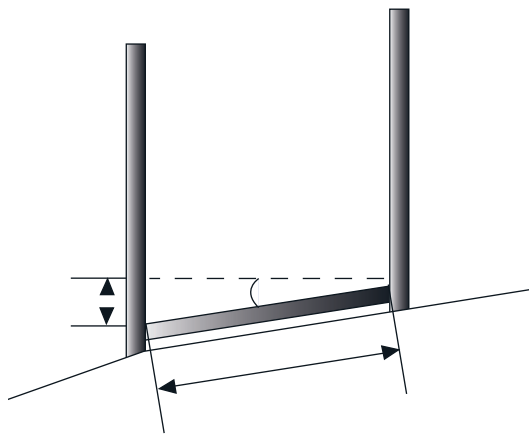
## Extruded

### Calculate Rise/Foot Angle

To determine the hole enlargement size, first calculate the slope rise/foot or the angle of the slope. Refer to the diagram and examples.

- Measure section length in inches
- Determine section rise by using line level and measuring vertical rise; measure rise in inches
- Divide rise by section length to get rise per inch
- Multiply by 12 to determine rise per foot

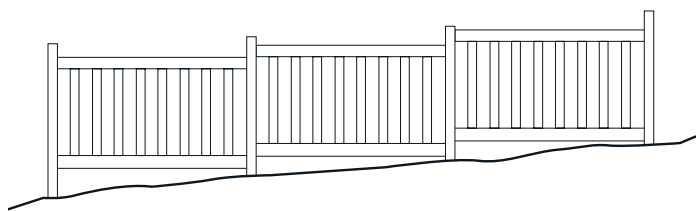
Example: 24" rise ÷ 96" length =  
.25 rise per inch = 3" rise per foot



- Two methods exist for installing a fence on variable sloping terrain — stepping and racking
- For either method, divide slope evenly into all sections

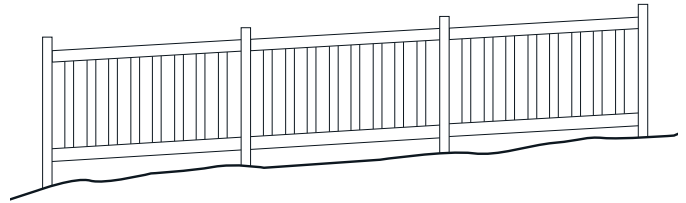
### Stepping Method

With the stepping method, the rails remain horizontal and the posts are extended to accommodate the variance in terrain. Longer end posts should be used and holes for the opposite side of the post can be field fabricated with template kit and router or spiral saw to accept rails.



### Racking Method — 10° or Less

With the racking method, the horizontal rails will follow the sloping terrain.



When installing multiple sections, it is advisable to use an end post and field fabricate the opposite side of the post to avoid a jagged fence line.

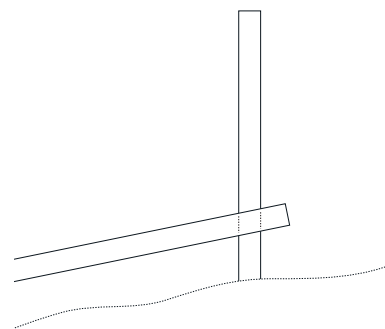
Depending on the severity of rack (and specific fence style), the following field fabrication steps may be necessary for proper installation:

1. Enlarge holes in post to accept rails
2. Enlarge holes in rail to accept pickets
3. Shorten picket length

*NOTE: Depending on severity of rack, post centers may need to be decreased. Be sure to verify prior to setting posts.*

### 1. Enlarge holes in post to accept rails

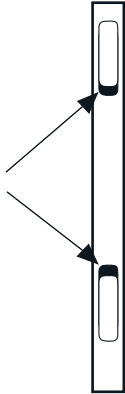
- Determine angle or slope
- Place first post in hole and hold plumb
- Place rail next to post (not in routed hole) at correct angle of grade
- Mark rail where post crosses it on angle
- Remove rail, measure the length of the drawn angle. Add 1/8" to this length to determine proper post hole size
- Enlarge post holes



# Variable Terrain Installation

## Extruded

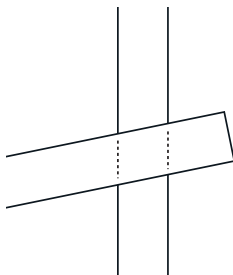
*Note: Always open bottom of top hole and top of bottom hole to maintain proper fence height.*



- Holes may be cut utilizing a template kit and router or spiral saw
- Determine location of holes on opposite side of line post by laying post across side of rail (align with routed hole) and marking exit position of rail on opposite side of post
- Cut holes with template kit and router or spiral saw as previous

## 2. Enlarge holes in rail to accept picket

- Position rail at desired angle
- Hold picket plumb against side of rail
- Mark picket where rail crosses it on angle



Measure the length of the drawn angle and add 1/8" to this length to determine proper rail hole size

- Enlarge holes with a spiral saw

*Note: Always cut the same side of each hole to maintain spacing.*

## 3. Shorten picket length

- For extreme racking situations, picket ends may need to be cut to accommodate rack
- Position top and bottom rails in routed post holes
- Position picket next to rails so it is plumb and aligned with bottom side of bottom rail
- Mark position where top of picket intersects with top of top rail; subtract 3/8" and cut picket to length

*NOTE: For ribbed rails, top and bottom of picket will need to be aligned with internal rib.*

## Variable Terrain Installation

### Molded

Installation on sloping terrain is similar to that on flat terrain. Professionals typically use a laser to shoot and obtain a grade.

- Set the first post on the uphill side. Post placement is important! Posts are typically placed at the point where the slope changes, whether in a peak or a valley.
- The panel support brackets should be pre-attached at 50" for 4', 74" for 6', and can receive the down hill side of the panel at that height. Once the slope and the drop per panel have been determined, the bracket on the uphill side should be adjusted to the proper height. Panels will always be set level even on a slope.
- Set the second post and make any adjustments to bracket position.
- Use steel stiffeners for spacing to set the distance for each succeeding post.
- Use a level on the stiffener to ensure panels will be level when installed.
- For more information see illustration A and B

*Note: A 6' wide panel can be stepped as much as 12" per panel. For steeper elevations you can use our 142" long post. To reduce the gap under the panel, you can reduce the width of the panel and add additional post.*

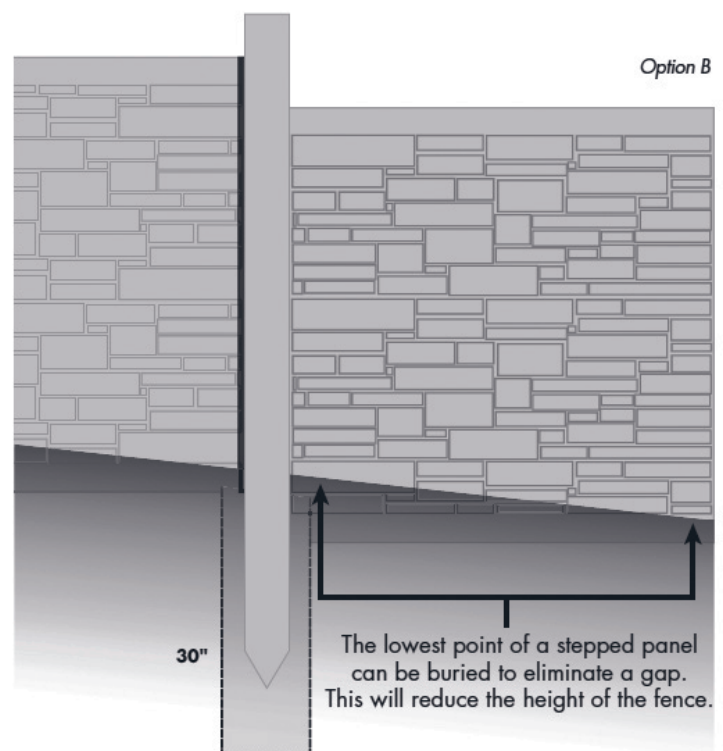
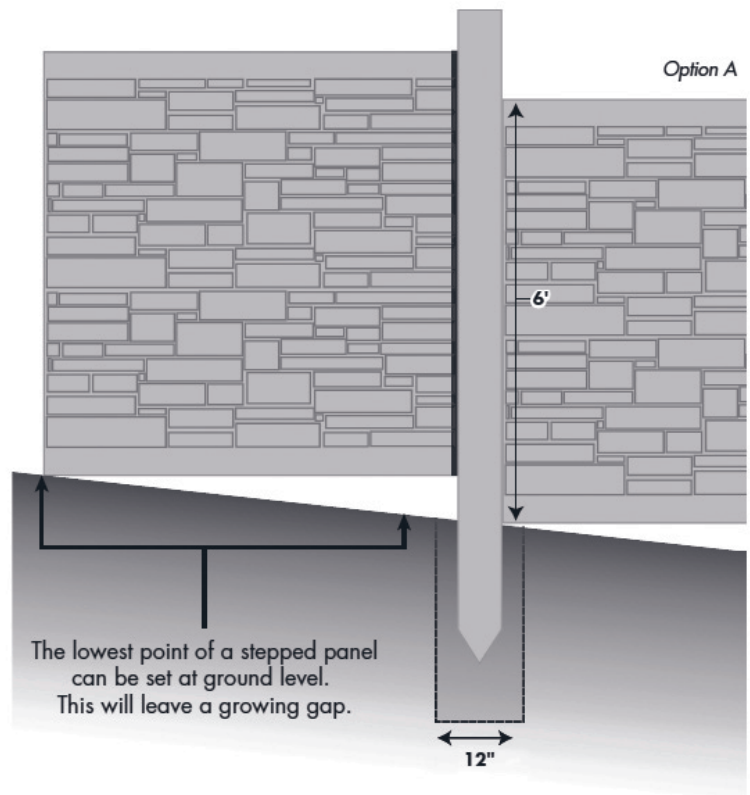
*For more details and instructions call your sales representative.*

## Stepping Method

With the stepping method, panels remain horizontal and posts are extended to accommodate the variance in terrain. Longer post may be required. (A 6' wide panel can be stepped up to 12" per panel using our 102" post. For steeper elevations our 142" post is required.)

1. Attach panel brackets on one side of post at standard height
2. Determine step and attach panel bracket to other side of post
3. Set first post on the uphill side and work your way down
4. Just as with level installation use panel stiffeners as spacers to set next post
5. Level stiffener and adjust bracket if necessary

**CAUTION:** Molded fence panels are not engineered for use as a retaining wall. If burying the bottom of a panel the ground level must be the same on both sides.



# Concrete Installation

## *Molded*

Molded fence panels can be installed on top of a 10" minimum width poured concrete wall or on flat concrete using our concrete mounting brackets. Concrete mounts are available for end, gate, line, and corner posts along with post skirts for a clean look. Be sure concrete is structurally sound for installation of fence.

### 1. Cutting down post

- a. Measure height from top of post
- b. Cut off bottom of post with metal cutting blade
- c. Never cut the top of the post

### 2. Install concrete mounting brackets

- a. Drill all four holes through the pre-drilled holes in the steel plate
- b. Install concrete mounts to concrete with fasteners with at least 4,000 lbs. shear strength (minimum bolt size is 1/2" x 4 1/2")
- c. Shim to level if necessary

### 3. Install post skirts

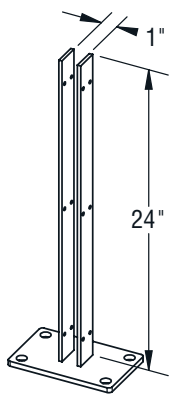
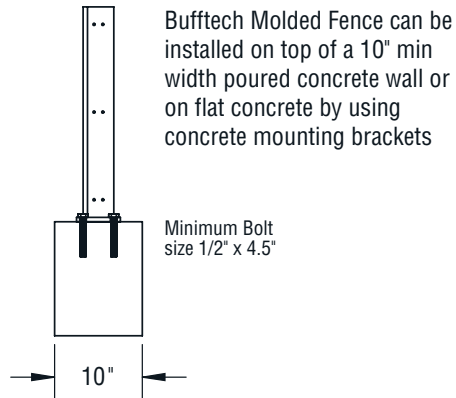
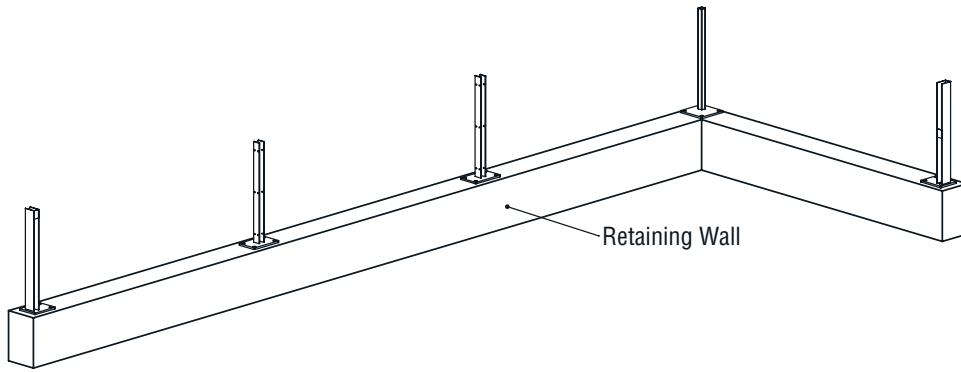
### 4. Install post to concrete mounting bracket

- a. Attached to concrete mounting with three screws (line post - insert three staggered screws on each side of the strap into the pre-drilled holes)

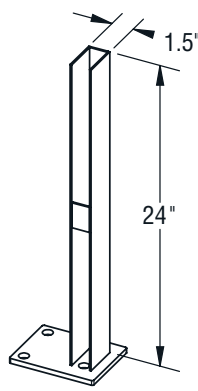
### 5. Install fence panels and post caps

*NOTE: Because panels normally sit directly on the wall or concrete surface panel brackets are unnecessary when using concrete mounts.*

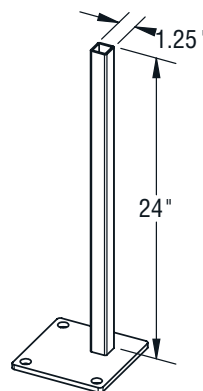
# Concrete Installation



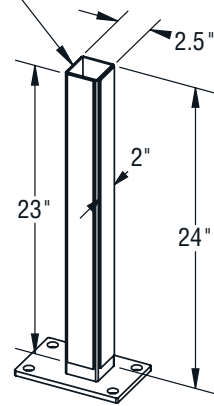
Line Shoe



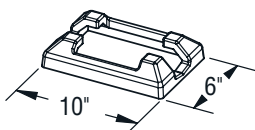
End Shoe



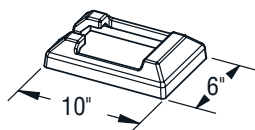
Corner Shoe



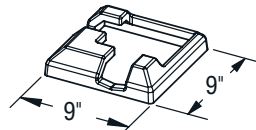
Gate Shoe



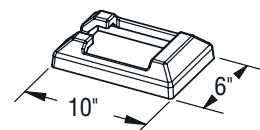
Line Shoe Skirt



End Shoe Skirt



Corner Shoe Skirt



Gate Shoe Skirt

# Post Routing Template Kit

The routing template kit can be used to enlarge holes for racking as well as to create transitions for stepping, changing heights or styles.

Install  $\frac{3}{8}$ " router blade and  $\frac{5}{8}$ " bearing or router guide. Any substitutions may result in improper hole size or damage to the template kit.

*Note: Template cutout size is designed to be  $\frac{1}{8}$ " larger than the finished cut to allow bearing to follow the shape.*

Select the appropriate template for the application.

Assemble the template as shown, configured for the desired post size (4" or 5").

*Note: It is advisable to practice routing on a scrap piece before attempting actual cut.*

Mark location of hole to be routed. Offset template cut by  $\frac{1}{8}$ " to allow for bearing (i.e., if hole is to be located 3" from top of post, position edge of template  $2\frac{7}{8}$ " from top).

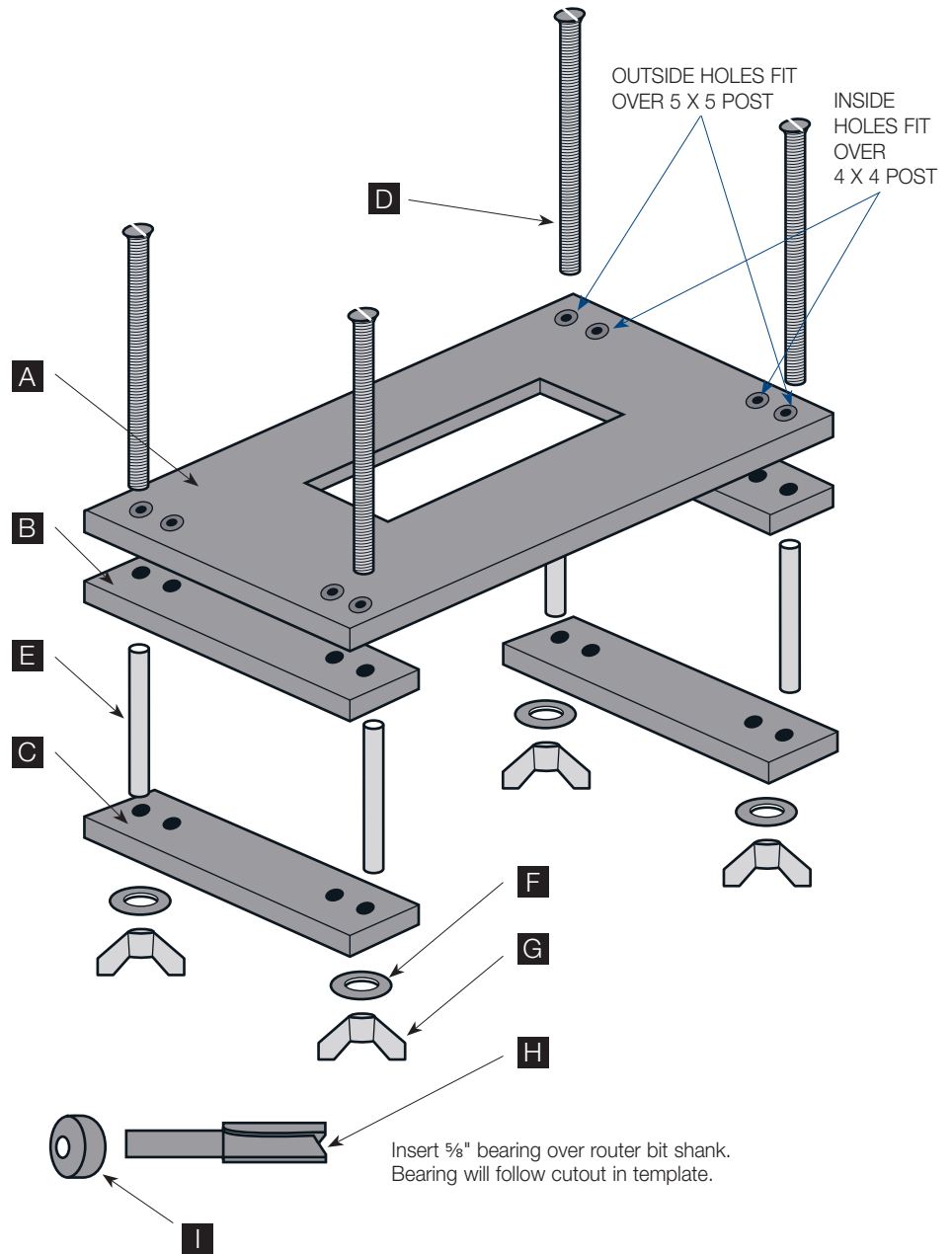
Tighten wing nuts. Place on a flat, firm surface to prevent tipping.

Route hole per manufacturer's recommendations.

**ALWAYS WEAR SAFETY GLASSES.**

Loosen wing nut and remove template.

For situations that require a larger hole to accommodate racking, route a standard hole, loosen wing nuts and slide template to new position to route excess material.



- A** ROUTING TEMPLATE
- B** 1 1/8" TEMPLATE SPACER PLATE
- C** 1 1/2" TEMPLATE SPACER PLATE
- D** 1/4" 20 X 6" BOLTS
- E** 3/8" OD PLEXI TUBE
- F** 1/4" FLAT WASHER
- G** 1/4" 20 WING NUT
- H** 3/8" ROUTER BIT W/ 1/4" SHANK
- I** 5/8" BEARING W/ 1/4" ID OPENING

## Breezewood Template



Breezewood template also available. Contact your Territory Manager for more details.

Each kit comes in a carrying case suitable for field use.

# Glossary

**Accent** — Decorative addition to top of fence such as lattice.

**Aluminum Channel** — Aluminum structural support used as a stiffener in rails.

**Auger** — Hand or machine-operated tool with a screw-like shank for boring holes in soil.

**Blocking** — Method for supporting horizontal members, such as fence rails or gates.

**Brace** — Diagonal component of a gate; provides dimensional stability.

**Bullet Clip** — Gravity clip that is used to hold rails in posts.

**Caps** — Vinyl accessory placed on top of fence posts to provide a finished look and prevent water penetration.

**Crimp Lock** — Method for fastening rails inside posts. The rail is notched (crimped) so that it stays within the post once inserted.

**EZ Set Bracket** — Aluminum bracket system that fits over a steel post as an alternative installation method to secure and hold vinyl post in position.

**Fence Layout** — Section-by-section diagram of the proposed fence line.

**Frost Line** — Lowest level in soil that freezes. Frost line depth depends on winter temperatures, soil type and vegetation cover, and varies from 0" in warm regions to 3' or more in cold-winter areas.

**Gate** — Movable framework or solid structure that swings on hinges; controls entrance or exit through an opening in a fence.

**Gate Post Stiffener** — Structural aluminum support used in gate hinge and latch posts to solidify as an alternative to traditional concrete and rebar method.

**Gloss** — Describes amount of reflection or sheen on the surface of vinyl.

**Good Neighbor Fence** — Fence that has the same look on both sides.

**Lock Ring** — Circular-shaped fastener with tabs that insert into rails for holding into posts.

**Opposite Gate** — Used in double-gate situations; complements the primary gate; diagonal brace is secured in the opposite direction for a pleasing, symmetrical look.

**On Center (O.C.)** — Measure from the center of one object (e.g., a post) to the center of the next post.

**Picket** — Vertical member of fence between rails.

**Post** — Vertical support member of fence system.

**Picket End Channel** — U-shaped channel attached to the posts on both ends of a privacy fence section.

**PVC** — Polyvinyl chloride, the plastic resin used to manufacture "vinyl" fence.

**Rail** — Horizontal pieces between fence posts.

**Racking** — Method of installing fence on sloped terrain. Fence posts and pickets are plumb, but the rails are secured at an angle so they parallel the grade.

**Rebar** — Reinforcing bar, placed in end and gate posts to vertically reinforce the fence; No. 4 rebar is 1/2" diameter.

**Routing Template** — A guide used for field routing posts that require hole positions other than standard.

**Scalloped** — Fence style in which the pickets follow a concave pattern high on both ends and low in the middle.

**Slope** — Degree of incline of a hillside; measured in inches of rise per horizontal inches of run (degree of rack).

**Snap Cap** — Decorative plastic cap and washer system used to cover the screw head.

**Spacer Bar** — Wood or like material used to determine infill area between sections or gates (post spacing).

**Steel Channel** — Galvanized steel structural support used as a stiffener in vinyl rails.

**Stepping** — Method of installing fence on sloped terrain. Fence rails remain horizontal, and posts are extended to accommodate the variance in the grade.

**Tamp** — Method of releasing air pockets in concrete by the use of repeated light blows with a mallet on outside of post or piece of lumber in post hole.

**Wall Mount Brackets** — Aluminum bracket system used as an alternative installation method to fasten fence rails directly to walls or other structural surface.

**Weep Holes** — Openings drilled in bottom rails for drainage of water.







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