Pipe Driven Privacy Fence Installation

Installing a PVC fence requires thoughtful planning, accurate post placement, and compliance with local regulations. A successful installation ensures the fence remains level, plumb, and stable - especially in areas prone to high wind or frost heave. The following guidelines provide an overview of best practices for installation.

Recommended Tools and Materials

- Protective Clothing
- Safety Glasses
- Hearing Protection
- Marking Pencil/Chalk/Paint
- String & Stakes
- Tape Measure
- Level
- Miter saw
- Helmet
- Post Driver/Pounder
- Fine Gravel/Sand
- Brackets for Pipe

Section #1: Planning and Preparation

- Locate property lines and all underground utilities. Check local municipality codes and HOA rules for height limits, setback requirements, and design restrictions.
- Allow for short sections. In almost every situation the fence layout will require a section shorter than the purchased pattern. This is done by cutting the top and bottom rails to length or sections may be 'equalized' by ripping a picket per section to make them all appear to be the same size.
- Plan for gates by making the opening between posts exactly the ordered size of the gate. Typically gates are built to be 1-1/2" smaller than the ordered size to allow clearances for hinge and latch set installation.
- For sloped ground, nibblers or files suitable for PVC can be used to enlarge a routed hole, or the fence can be stepped.
- In some cases, it is necessary to run a fence across concrete or deck material. This can be done by installing appropriate size post mounts. The post is then cut off to the correct height and slid over the mount.

Section #2: Fence Layout

- Using stakes and string mark the fence path to establish where the fence posts will be positioned. Use a fence post and set it on top of the ground at the first corner. Put stakes in the ground and repeat at all corners and ends. Run the line at the height desired for the bottom rail.
- Measure the panel spacing to determine the "on-center" post spacing by combining the panel width (commonly 6-8 feet) with the post width (typically 5").

Section #2: Fence Layout (Continued)

- Use a measuring tape to locate the center position of each post. Mark the location with chalk/paint.
- After the center of post locations are marked, remove the string and stakes.

Section #3: Post Installation

- Using the post driver/pounder, drive an 8' schedule 40 or PT40 galvanized pipe into the ground to a depth of 4 feet. This will leave 4' of the galvanized pipe out of the ground for each post location. Repeat this step for each marked post location.
- Install the appropriate brackets (or "donuts") to each pipe at the bottom and near the top of each pipe. These should be fastened to the galvanized pipe using the manufacturer's instructions after they are aligned using a string and level.
- Vinyl posts are cut to slightly larger than surface length, usually a 78" length for a 6 foot tall fence. The vinly post can then be sleeved over the galvanized pipe and brackets.

Section #4: Bottom Rail Installation

- Cut the PVC bottom rails to a length just shy of the distance between the first pipe and the next pipe. Rails should typically insert 1" to 1-1/2" into the PVC fence post.
- Insert the bottom rails into the routed holes on the PVC fence post. Lift up on the second post to be able to get the bottom vinyl rail into the routed holes and then push down to reset the post where it goes. Repeat this step for each bottom rail before continuing.
- Stiffeners should be used in all bottom rails. Please reference VEKA's Fence Reinforcement Guidelines for recommendations on fence stiffeners.

Section #5: U-Channel Installation

- Install the u-channels to the posts with 2 to 4 anchor points in between the bottom of the top routed hole and the top of the bottom routed hole in the PVC fence post. Repeat this step, installing all u-channels.

Section #6: Panel Installation

- Beginning on one end, place the first picket into the bottom rail and u-channel. Moving down the panel, insert the pickets into the bottom rail, interlocking the tongue and groove as you assemble. For less than full sections, a ripped picket may be necessary. Attempt to keep ripped pickets no smaller than 3", rip an additional picket on the other end of the panel if necessary to avoid ripped pieces < 2-1/2" to 3".

Section #7: Top Rail Installation

- Cut the PVC top rails so that they insert 1-1/2" into the PVC fence post.
- Place one end of the top rail into a routed PVC fence post hole and guide it to the opposite routed PVC fence post hole. Insert pickets into the top rail as you move down the panel. After all pickets are inserted into the top rail, slide the loose end of the top rail into the routed PVC fence post hole. Repeat this step for all fence top rails.
- Please consult VEKA's Fence Reinforcement Guidelines for usage of a metal stiffener in the top rails application.

Section #8: Final Post and Rail Setting

- Sight in all fence posts moving them up or down to achieve the best finished look possible. Secure posts heights by fastening into the brackets inside the PVC fence post. Repeat for all PVC fence posts after viewing the fence from multiple angles to achieve the desired finished look.
- Top rails should be secured inside the PVC fence posts using rail ties, and/or screws to keep the rails from being able to come out of the fence posts.

Section #9: Final Steps

- Attach post caps using PVC adhesive or silicone to prevent them from loosening.
- Clean the fence by rinsing off any dirt or debris.

Warranty Note

VEKA has not evaluated and does not recommend any specific pipe-driven installation method. For guidance, please consult the American Fence Association regarding pipe-driven fence installation practices. The installer is soley responsible for evaluating all relevant site and design conditions, including but not limited to soil composition, fence style and size, post wall thickenss, and applicable wind load exposure when selecting and implementing a pipe-driven system. VEKA expressly disclaims any and all liability for field performance or failures associated with pipe-driven installations.