



# MiniJet with Fan Nozzle Installation Guide Part # FFMJ-FN1 / FN2

## A. Overview

The MiniJet may be mounted vertically in a wall, pool beam, etc. or horizontally in the pool deck, wall cap, planter, etc. The following instructions will guide you through the installation. Please read very carefully.

## B. Preparing the MiniJet

1. Tape over cover plate of niche.
2. Remove the tape as soon as possible. Use mineral spirits to clean off any adhesive remaining on the cover plate.

## C. Setting the MiniJet

1. Concrete beam installation:
  - a. Layout the center lines of the MiniJets to coordinate with your tile pattern.
  - b. Cut or block out a 6" x 6" notch through the beam.
  - c. Attach the 1/2" feed pipe to the MiniJets, ensuring the pipe extends past the rear of the beam.
  - d. Mud the MiniJet into place. Check the level, plumb, and center lines during the setting process.
  - e. Cut the flange on the MiniJet if it hinders placement, leaving at least 1/2" of flange to serve as a water stop. A hacksaw or jig saw will easily cut the flange.

2. Deck Installation:
  - a. Attach the 1/2" feed pipe to the MiniJets.
  - b. Anchor the MiniJet so that it is level and at the proper elevation to match the finished design.
  - c. Complete the remaining plumbing that will be covered by the deck. (See Plumbing Tips).

Performance Data				
Nozzle Size	3/8" (FN1)		1/2" (FN2)	
GPM	2.12	4.24	3.5	7
Distance of Throw	12'	15'	10'	14'
Spread	2'	3'	4.5'	7'
Angle Fixed	45	45	45	45

Figure 1

## D. Plumbing Tips

1. Pipe Sizing:
  - a. Water flow and water pressure controls the projection of the stream of water. As a rule, 4.24 GPM for 3/8" nozzle and 7 GPM for 1/2" nozzle will provide adequate water flow for most projects. See Fig. 1 for performance data.
  - b. Determine the size of the manifold or plumbing loop and return line required for a given number of MiniJets. See Fig. 2 for pipe sizing data.

MiniJet Pipe Sizing		
Maximum MiniJets	Return Pipe Size	Suction Pipe Size
8	1-1/2"	1-1/2"
12	2"	2"
16	2-1/2"	2-1/2"
26	3"	3"

Figure 2

2. Connecting the MiniJet:
  - a. Use the 1/2" PVC pipe to connect the MiniJet(s) to the manifold or plumbing loop. See Fig. 3.
  - b. Cut risers to equal lengths for lined MiniJets that will project water streams of equal distance. See Fig. 3.
  - c. Valve MiniJets separately if they will not be set in lines parallel to the pool edge.

- d. Keep the 1/2" feed pipe short, and manifold or loop as close to the beam as possible.
- e. The manifold pipe should extend 5' past the last MiniJet. See Fig. 3.

## E. Finishing Touches

1. Use acrylic base auto-body paint for the MiniJet cover plate. Clean the niche cover plate of oils, dirt, or adhesives with a suitable cleaner before painting.
2. Adhere tile to the MiniJet cover plate using one of the following methods:
  - a. Using a 3" x 3" tile, cut a slot for the water stream to pass through.
  - b. Cut tile to create a simulated grout line that matches the MiniJet faceplate opening.
  - c. Stone, brick pavers, or other materials can also be used to cover the MiniJet.
  - d. Custom metal covers can be made by local metal stamping companies if provided with the plastic MiniJet cover plate for a template.

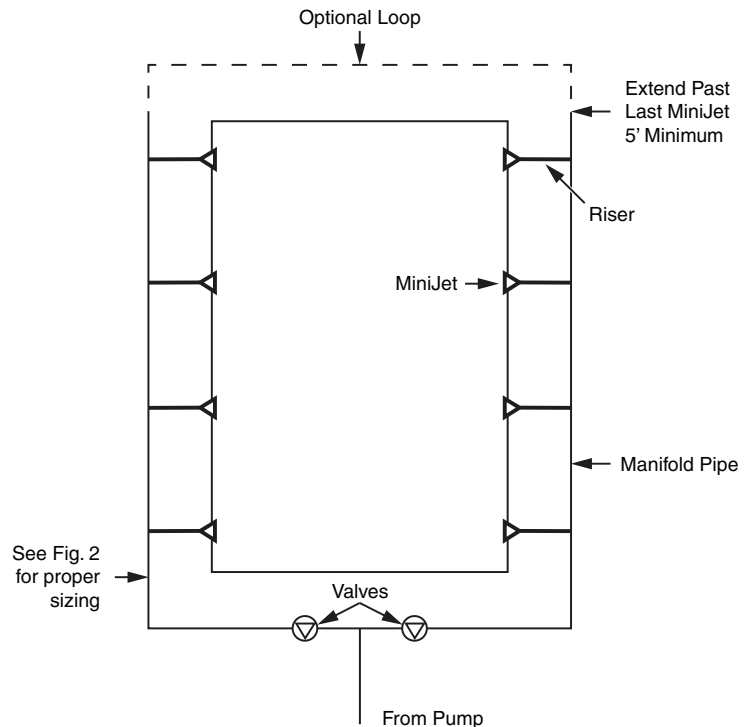


Figure 3

## F. Start-Up

1. When the pool water has been cleaned and is ready for start-up, run water through the MiniJet plumbing to clear those lines.
2. Adjust the plumbing valves with water running through the MiniJets until the desired projection is attained.

**Note:** It is always advisable to be careful with fountain plumbing. Ensure that dirt, organic matter, rock or gravel does not enter the plumbing lines. Clean pipes of debris. Then, either tape or cap the ends during construction. This will ensure a trouble-free start-up.

Please contact your local Polaris representative or Polaris Water Designs at 800-822-7933 with any questions concerning the installation of MiniJets.

*WaterDesigns*