



Extra tips for installing MicroFAST Systems

This document should be used in conjunction with the documentation supplied by the manufacturer to help the installer plan for a smooth installation and minimize extra trips for supplies. It is based on practical experience from guys that have installed many FAST units and should provide ideas about how to tackle different issues and includes pictures from installers. This should not be interpreted as an endorsement of their work or be used in lieu of the manufacturer's specifications.

Items needed for FAST installation

- The current Install Manual
- The current Tank Diagrams
- Power to run the blower and to check for back pressure, and to test the panel and alarms
- Water to check operating level, observe airlift operation, test seals, etc.
- Lidded application (FAST unit hanging from the lid, as opposed to installed inside the tank – rarely used) only:
 - Appropriate drill and bit for lid anchors
 - Caulk gun

Blower:

The blower can be installed above or below ground.

TIPS:

See Notes 1, 3 and 10 on the FAST Tank Diagram

Plan where the pad will be and what material will be used (*e.g.* vault, poured pad, AC condenser pads, etc.)

There must be fall to the tank

ITEMS NEEDED:

- 2" Pipe and fittings - No more than 100' between the blower and system and no more than 4 elbows
- GTS can supply an Air Supply Kit that includes all the fittings to penetrate the riser, inside that tank and quick-disconnect for servicing the blower
- Hole-saws for pipe and electric penetrations
- Conduit and wire
- Caulk, Sikaflex, PVC glue and Teflon tape

ABOVE-GROUND BLOWER HOUSING (aka doghouse)

TIPS:

- Pour concrete pad per manual
- AC Condenser pads – If using the plastic type, fill the open ribs with foam to fill gaps because they can sink with vibration

ITEMS NEEDED:

- Anchoring hardware and drill bits
- Base

BELOW-GROUND BLOWER VAULT (buried blower)

TIPS:

Not recommended for areas where water intrusion is likely

Air intake should prevent water, debris, critters, etc. from entering the vault; a gooseneck and grate work well

Keep the distances (between intake to blower, and blower to system) to a minimum

Use drain rock below the riser to prevent the vault from flooding

ITEMS NEEDED:

- GTS can supply a Blower Vault Kit that includes riser material, lid and electrical fittings/conduit inside vault.
- 24" or larger diameter pipe/riser material with lid, with holes should be drilled near the bottom to allow for drainage
- Lid for vault
- Solid base for blower: paver, cinderblock, etc.
- 3 or 4" intake pipe and fittings to supply air to the vault
- Drain rock

Venting:

TIPS:

See Notes 2 and 3 on the FAST Tank Diagram.

Plan out your remote venting scheme.

Vent the system away from areas where people are likely to be present (including windows, vents, patios, etc.)

The vent pipe must have fall to the tank and should prevent water, debris, critters, etc. cannot enter the system.

A gooseneck and grate work well, as does a carbon filter (manufacturer specifies screen size).

ITEMS NEEDED:

- 4" pipe and fittings
- Glue
- Stainless screws depending on type of vent cap
- Recommended: Sweet Air brand carbon filter (<http://www.sweetair.com/>) at the end of the remote vent. Sweet Air will recommend the correct model, and pack the carbon to optimize venting and filtration, based on the FAST model
- There is an option for a Bio Filter (*i.e.* bark bed, typically used in higher strength applications. Guidance document available.

Control Panel:

TIPS:

See Note 3 on the FAST Tank Diagram.

Plan the panel location. The panel should be as close as possible and at a reasonable ergonomic height for testing/service, with line-of-sight to the system.

ITEMS NEEDED:

- Dedicated circuit breaker
- Analog phone line if using a dialer
- Mounting hardware and drill bits
- Conduit, fittings, jam nuts, glue and plumbers putty to seal the conduit from tank gases. If required by local code, explosion-proof fitting
- Drill bits/Hole-saws for penetrations
- Caulk, Sikaflex
- Wire and fish-tape
- Wire strippers, small screwdriver and Multimeter for testing



Airline secured non-corrosively



Blower doghouse on concrete w/ multiple panels



In-ground blower – ABS direct vent



Shallow install with above-ground blower



In-ground blower



Overview with in-ground blower