

# Specifications For RetroFAST 0.375 Wastewater Treatment System

## 1. GENERAL

The contractor shall furnish and install (1) RetroFAST 0.375 treatment system as manufactured by Bio-Microbics, Inc. The treatment system shall be complete with all needed equipment as shown on the drawings and specified herein.

The principal items of equipment shall include FAST System insert, insert lid, blower assembly, and blower housing. The RetroFAST 0.375 unit shall be situated within a tank with minimum inner dimensions of 36 inches-L, 40 inches-W, and 36 inches-H, as shown on the plans. Tank(s) must conform to local, state, and all other applicable codes. The contractor shall provide coordination between the FAST system and tank supplier with regard to fabrication of the tank, installation of the FAST unit and delivery to the job site.

## 2. OPERATING CONDITIONS

The RetroFAST 0.375 treatment system shall be capable of treating the wastewater produced by typical family activities (bath, laundry, kitchen, etc.) ranging from (1) one to (5) five persons and not to exceed 375 US Gallons per day (1420 LPD).

## 3. MEDIA

The FAST media shall be manufactured of rigid PVC, polyethylene or polypropylene and it shall be supported by the polyethylene insert. The media shall be fixed in position and contain no moving or wearing parts and shall not corrode. The media shall be designed and installed to ensure that sloughed solids immediately descend through the media to the bottom of the septic tank.

## 4. BLOWER

The RetroFAST 0.375 unit shall come equipped with a regenerative type blower capable of delivering 9-24 CFM. The blower assembly shall include an inlet filter with metal filter element.

## 5. REMOTE MOUNTED BLOWER

The blower shall be mounted remote, up to 100 feet (30.5 M) maximum with no more than four elbows, from the RetroFAST unit on a contractor supplied concrete base. The blower must not set in standing water and its elevation must be higher than the normal flood level. A two-piece, rectangular housing shall be provided with tamper-proof screws. The discharge air line from the blower to the RetroFAST shall be provided and installed by the contractor.

## 6. ELECTRICAL

The electrical source should be within 150 feet of the blower. Consult local code for longer wiring distances. The input power required for the blower is 115/230 Volts, Single Phase, 60/50 Hertz, 2.4/1.2 Full Load Amps, minimum wire size is 16 A.W.G. (Locked Rotor Amps are 8.5/4.3). All conduit and wiring between the electrical control panel (optional), the power supply, and the blower shall be furnished and installed by the contractor.

## 7. INSTALLATION AND OPERATING INSTRUCTIONS

All work must be done in accordance with local codes and regulations. Installation of the RetroFAST 3.75 shall be done in accordance with the written instructions provided by the manufacturer.

## 8. ALARMS

The alarm system shall consist of a visual and audible alarm to indicate loss of power to the blower. A manual silence switch is included.

## 9. WARRANTY

The manufacturer of the RetroFAST 0.375 treatment system shall warrant for three years from the date of shipment or two years from the date of start-up, whichever occurs first, that the equipment they provide will be free from defects in material and workmanship.

In the event a mechanical component fails to perform as specified or is proven defective in service during the warranty period, the manufacturer shall repair or replace such defective parts. (Cost of labor on repair/replacement is not covered under this warranty.) The replacement or repair of those items normally consumed in service such as air filter, etc., shall be considered as part of routine maintenance and upkeep.

It is not intended that the manufacturer and distributor assume responsibility for contingent liabilities or consequential damages of any nature resulting from defects in design, material or workmanship, or delays in delivery, replacement, or otherwise.

## 10. FLOW AND DOSING

Wastewater treatment systems work best when influent flow is delivered as consistently as possible. When influent flow is controlled (either by pump or other means) to the FAST system to help with highly variable flow conditions, then multiple feeding events should be used to help assure even flow, optimum performance, and reliability.

DRAWN	jdu
SCALE	
DATE	12/20/04
APPROVED	

7125 East Pickard Road  
 P. O. Box 309  
 Mt. Pleasant, MI 48804-0309  
 ph-989-773-9938  
 fax-989-772-3415

**MILAN**  
 Engineered  
 Systems

REVISION	DATE	BY
12/04		jdu

NO	1	2	3	4	5
SHEET	2		OF 2		

DRAWING NO. **M9**