

**NOTES**

1. The ABC-N® treatment module supplied pump includes 20 feet [6m] of electrical cord.
2. All appurtenances to ABC-N® (e.g. tank pump outs, etc.) must conform to all applicable country, state, province, and local plumbing and electrical codes.
3. Must increase tank size by 20% if minimum of 15 inches [25.5cm] is used between the unit and the base of tank. Consult factory for approval.
4. Optional carbon feed supplied by others.
5. All inspection, viewing and pump out ports must be secured to prevent accidental or unauthorized access.
6. Tank, piping, conduit, risers, and manholes are provided by others.
7. All piping and ancillary equipment installed after ABC-N must not impede or restrict free flow of effluent
8. Minimum height may be reduced, consult factory and reference "Short-FAST-Module-Procedure.pdf."
9. Refer to sheet 3 of 3 ABC-N® 0.75 Details drawing for leg extension requirements.

DO NOT SCALE UNLESS NOTED DIMENSIONS ARE IN INCHES [CENTIMETERS] TOLERANCES ± 0.02 IN/IN [± 0.05 CM/CM]		<b>BIO MICROBICS</b> BETTER WATER. BETTER WORLD.  ABC-N 0.75	
WEIGHT	lb	SIZE	DRAWING NUMBER
		A	ABC-N® 0.75
DRAWN	CTC	DATE	8/20/2008
CHECKED	PF	DATE	4/15/2014
		REVISED	4/15/2014
		REV.	INI-01-H

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SHEET  
1 OF 3

## Specifications for ABC-N 0.75 Wastewater Treatment System

### 1. GENERAL

The contractor shall furnish and install (1) ABC-N 0.75 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 ABC-N System insert, leg extensions, and pump. The ABC-N 0.75 unit shall be situated within a 625 Gallon (2400L) minimum tank, as shown on the plans. Tank(s) must conform to local, state, and all other applicable codes. The contractor shall provide coordination between the ABC-N system and tank supplier with regard to fabrication of the tank, installation of the ABC-N unit and delivery to the job site.

### 2. OPERATING CONDITIONS

The ABC-N treatment system shall be capable of using nitrified waste to sustain a viable biomass. Waste containing inhibitory substances is not recommended for treatment in the ABC-N system. Consult factory for proper sizing and usage.

### 3. MEDIA

The ABC-N 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 descend through the media to the bottom of the septic tank.

### 4. PUMP

The ABC-N 0.75 unit shall come equipped with a continuous duty recirculation pump and recirculation assembly.

### 6. ELECTRICAL

The electrical source should be within 150 feet [45.7 meters] of the pump consult local codes for longer wiring distances. All wiring must conform to all applicable codes(IEC, NEC, etc.). Wiring distances must prevent significant voltage loss. Input power on 60Hz electrical system is 115 VAC, single phase, 7.5 amps. All conduit and wiring shall be supplied by contractor.

### 7. ALARM PANEL (Optional)

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

### 8. INSTALLATION AND OPERATING INSTRUCTIONS

All work must be done in accordance with local codes and regulations. Installation of the ABC-N shall be done in accordance with the written instructions provided by the manufacturer. An operation and maintenance manual shall be furnished which will include a description of system installation, operation, and maintenance procedures.

### 9. FLOW & PIPE SIZING

Each ABC-N module is provided with a standard (4) four inch effluent pipe hole and gasket. The maximum free or unrestricted flow with a four inch effluent pipe is 90 U.S. Gallons per minute (341 LPM), or 45 U.S. GPM (170 LPM) with a 2.0 design safety factor. An optional (6) six inch hole and gasket can be utilized on the same centerline dimension or up to 2 inches (5 cm) higher. Maximum free or unrestricted flow with a 6 inch effluent pipe is 260 GPM (984 LPM) or 130 GPM (492 LPM) with a 2.0 design safety factor.

ABC-N systems have been successfully designed, tested and certified receiving gravity, demand-based influent flow from nitrification systems. When influent flow is controlled by pump or other means to help with highly variable flow conditions, then multiple dosing events should be used to help ensure even flow. When influent flow is controlled (either by pump or other means) to the ABC-N system to help with highly variable flow conditions, then multiple feeding events should be used to help assure even flow, optimum performance, and reliability.


### 10. WARRANTY

Bio-Microbics, Inc. warrants all new ABC-N® models (ABC-N® 0.5, 0.75, 1.0, 1.5, 3.0, 4.5, and 9.0) against defects in materials and workmanship for a period of one year after installation or eighteen (18 months) from the date of shipment which ever occurs first, subject to the following terms and conditions:

During the warranty period, if any part is defective or fails to perform as specified when operating at design conditions, and if the equipment has been installed and is being operated and maintained in accordance with the written instructions provided by Bio-Microbics, Inc., Bio-Microbics, Inc. will repair or replace at its discretion such defective parts free of charge. Defective parts must be returned by owner to Bio-Microbics, Inc.'s factory postage paid, if so requested. The cost of labor and all other expenses resulting from replacement of the defective parts and from installation of parts furnished under this warranty and regular maintenance items such as filters or bulbs shall be borne by the owner. This warranty does not cover general system misuse, aerator components which have been damaged by flooding or any components that have been disassembled by unauthorized persons, improperly installed or damaged due to altered or improper wiring or overload protection. This warranty applies only to the treatment plant and does not include any of the house wiring, plumbing, drainage, septic tank or disposal system. Bio-Microbics, Inc. reserves the right to revise, change or modify the construction and/or design of the FAST system, or any component part or parts thereof, without incurring any obligation to make such changes or modifications in present equipment. Bio-Microbics, Inc. is not responsible for consequential or incidental damages of any nature resulting from such things as, but not limited to, defect in design, material, or workmanship, or delays in delivery, replacements or repairs.

THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES EXPRESS OR IMPLIED. BIO-MICROBICS SPECIFICALLY DISCLAIMS ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

NO REPRESENTATIVE OR PERSON IS AUTHORIZED TO GIVE ANY OTHER WARRANTY OR TO ASSUME FOR BIO-MICROBICS, INC., ANY OTHER LIABILITY IN CONNECTION WITH THE SALE OF ITS PRODUCTS. Contact your local distributor for parts and service.

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ABC-N 0.75			
WEIGHT	lb	SIZE	DRAWING NUMBER
		A	ABC-N® 0.75
NAME	DATE	Specifications	
DRAWN	8/20/2008		
CHECKED	PF 4/15/2014	REVISED	4/15/2014
		REV.	

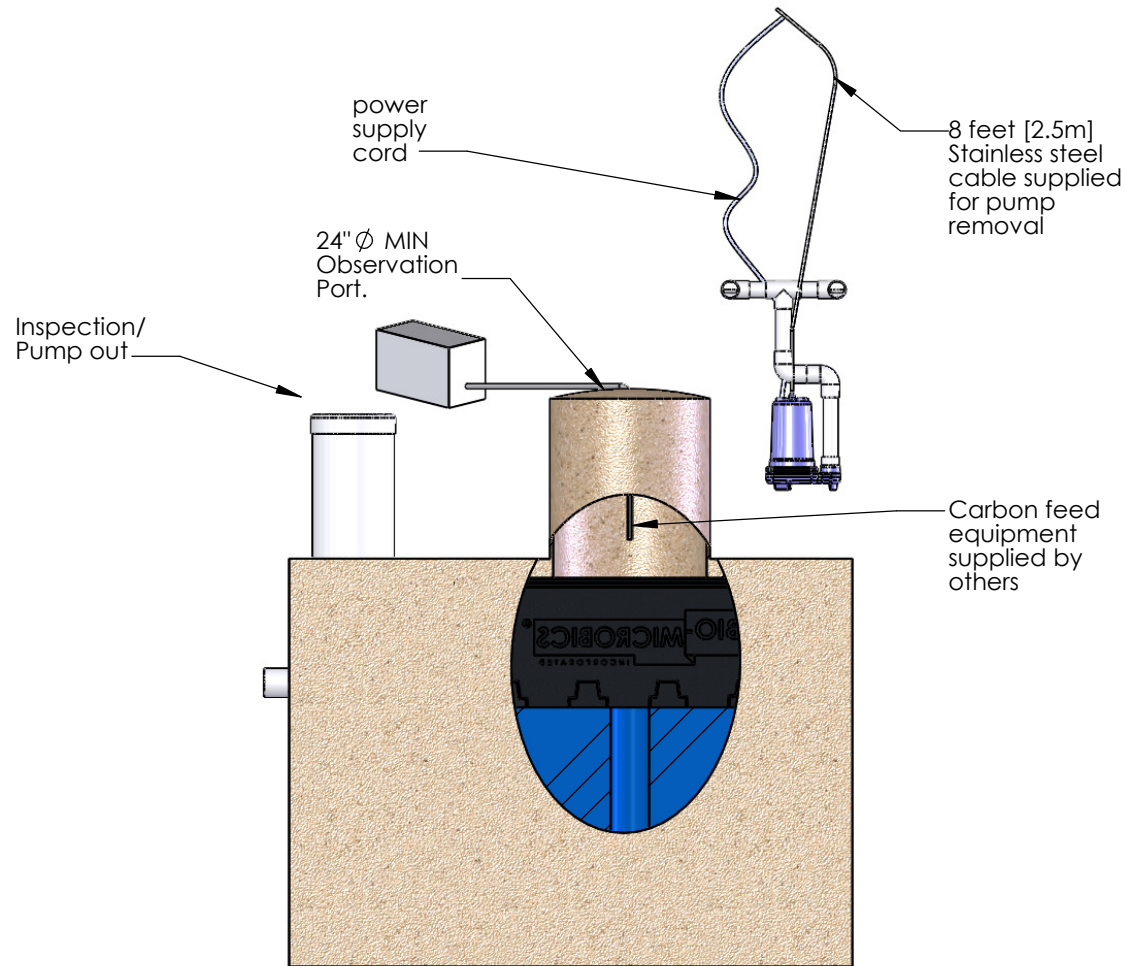
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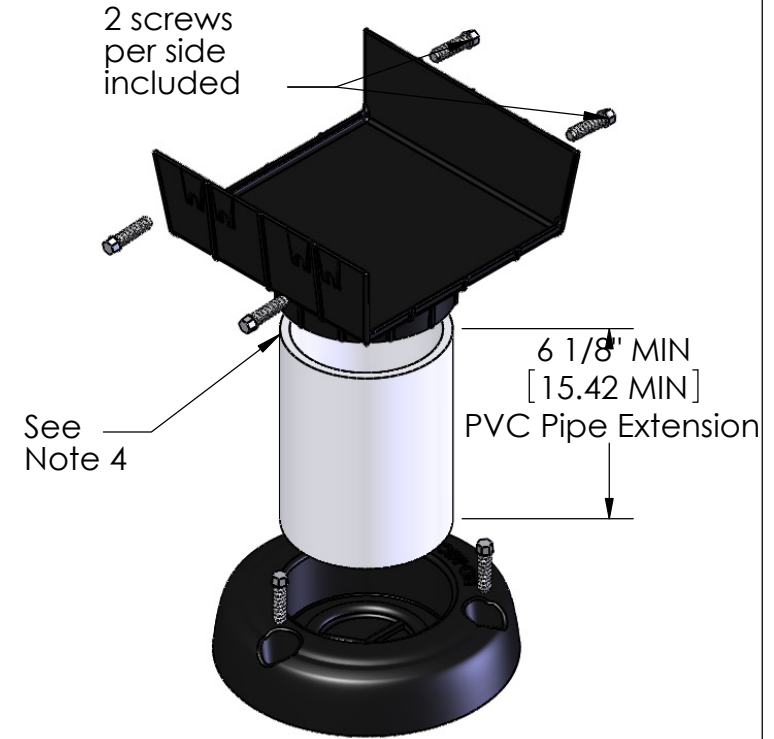
SHEET  
2 OF 3

Notes:

1. Secure leg extension to the ABC-N® unit by placing two screws on each side of the leg extension (4 screws per foot are included).
2. To obtain the desired height of leg cut 4" [10] schd. 40 PVC pipe (not included). Minimum pipe length of 11.125" [28.26]; For heights greater than 18" [45.7] use schd. 80 PVC pipe (not included). Consult factory for extending leg beyond 36" [91].
3. Anchor the leg extensions to the tank with non-corrosive hardware (not included) at the provided mounting points.
4. Increase minimum tank volume by 20% if minimum leg extension is used. See Minimum leg extension assembly Sheet 3 of 3 ABC-N@0.75 Details.
5. Tank, anchors, piping conduit, blower, housing pad and vents are provided by others.
6. Control panel for pump operation is optional.



Minimum leg extension assembly



DO NOT SCALE  
UNLESS NOTED  
DIMENSIONS  
ARE IN INCHES  
[CENTIMETERS]  
TOLERANCES  
± 0.02 IN/IN  
[± 0.05 CM/CM]



ABC-N 0.75

WEIGHT	lb	SIZE	DRAWING NUMBER	SHEET 3 OF 3
NAME	DATE	A	ABC-N® 0.75 Details	
DRAWN	CTC 8/20/2008			
CHECKED	PF 4/15/2014		REVISED 4/15/2014 REV. INI-10-G	

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