



# BioCoir<sup>®</sup>

Coconut Fiber Biofilter

## Residential Design Guide



## Residential Strength Waste Table

Constituents	Pretreated <sup>1</sup> Max	Primary Treated <sup>2</sup>		
		30-day Avg	7-day Max	30-day Max
CBOD <sub>5</sub> mg/L	≤ 300	150	200	300
TSS mg/L	≤ 350	75	100	150
TN mg/L	≤ 60	60	75	120
FOG mg/L	≤ 30	20	25	25
pH	6.0 to 9.0	6.0 to 9.0		

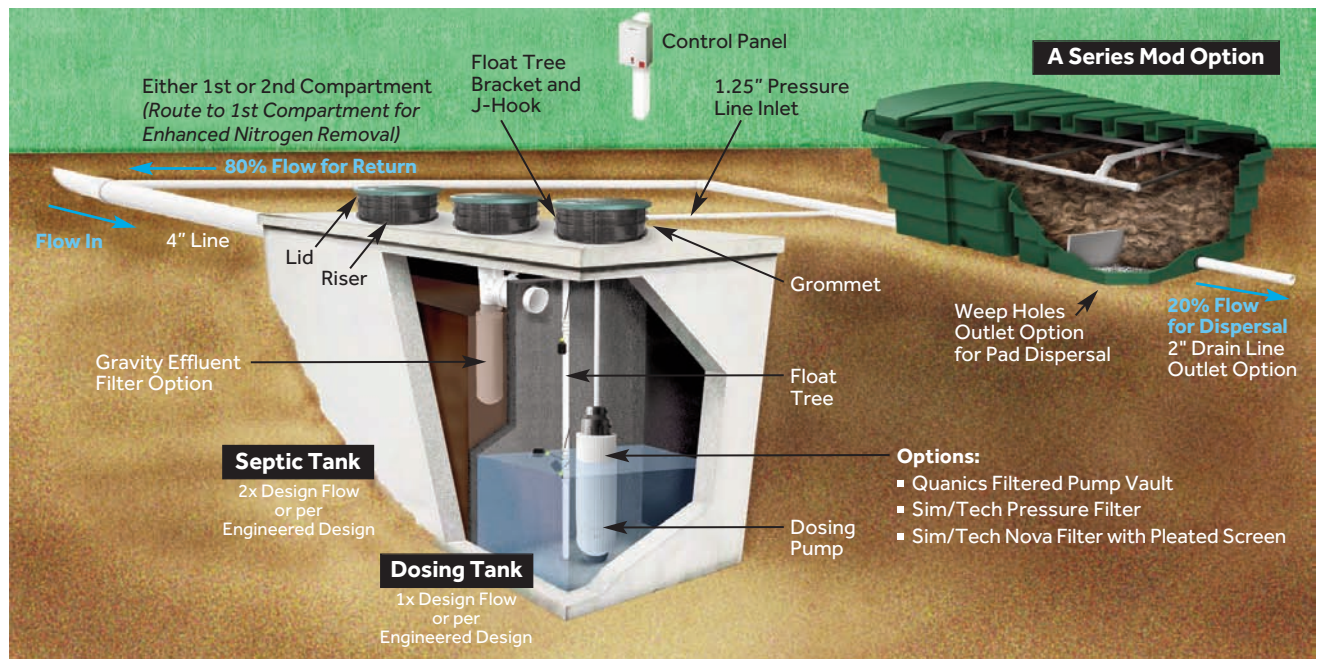
<sup>1</sup> Pretreated: Raw wastewater prior to entering the septic tank.

<sup>2</sup> Primary treated: Effluent at the discharge of the septic tank.

**Note:** This is Anua's definition of pretreated/primary treated residential wastewater.

If the wastewater exceeds these parameters, treatment goals may not be achieved and may require additional treatment.

## Typical BioCoir System Configuration



## Step 1 Information Gathering

Design Flow (GPD)	Number of Bedrooms	Number of Occupants

**Note:** Average flow (GPD) is defined as 60% of design flow for 150 GPD per bedroom and 75% of design flow for 120 GPD per bedroom.

## Step 2 Size the Septic Tank and Dosing Tank

Model Number	Septic Tank Minimum Size (Gal)	Dosing Tank Minimum Size (Gal)
Q-ATS-A400-80/20-BC	800	400
Q-ATS-A400-80/20-2-BC	1600	800
Q-ATS-A400-80/20-3-BC	2400	1200
Q-ATS-540-BC-N	1000	500
Q-ATS-1060-BC-N	1600	800
Q-ATS-1530-BC-N	3000	1500

**Notes:**

1. Tank sizing values in table are for the specified design flow.
2. For other design flows, use 2x daily flow for septic tank minimum size and 1x daily flow for dosing tank minimum size.
3. Single tank configuration may be used with first compartment sized at least 2x daily flow and second compartment sized at least 1x daily flow.

## Step 3 Select an Effluent Filter

- Sim/Tech Pleated Gravity Filter
- Zabel A300
- Polylok PL-625
- BEST GF10-32

## Step 4 Select a Quanics Filtered Pump Vault or Sim/Tech No-Vault Pump Filter

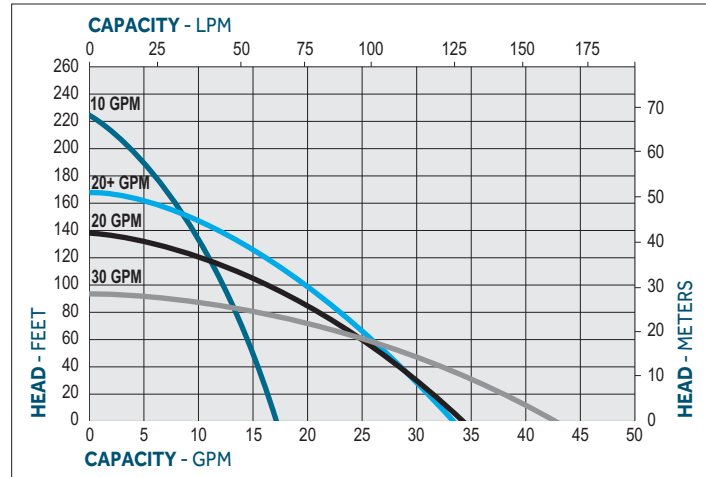
Available models with heights

Model Number	Height
Q-FPV-H44-4	44"
Q-FPV-H50-4	50"
Q-FPV-H56-4	56"
Q-FPV-H68-4	68"
STF-NV06-24-1.25PL	24"

## Step 5 Verify Dosing Pump Based on TDH

Model Number	Total Spray Nozzles
Q-ATS-A400-80/20-BC	4
Q-ATS-A400-80/20-2-BC	8
Q-ATS-A400-80/20-3-BC	12
Q-ATS-IM540-BC-N	2
Q-ATS-IM1060-BC-N	4
Q-ATS-IM1530-BC-N	5

Note: Spray nozzles = ~2.9 GPM @ 5 PSI  
and ~3.4 GPM @ 8 PSI



## Step 6 Select Treatment per the Engineering and Technical Specifications Sheet

## Step 7 Verify Other Components Included in Standard Package

- 1.25" discharge assembly
- Junction box
- Control panel
- Float switches

## Step 8 Select Optional Components

- Access risers
- Access lids
- Tank adapters with mounting hardware
- Tank/riser sealant or adhesive
- Rubber grommets



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