

# ACCUPAC<sup>®</sup>

# MIXED MEDIA

## *Cross Flow Media*

is used in top two layers where distribution is most important.



*Williamsburg WWTP  
Hampton Roads Sanitation District  
Williamsburg, Virginia*

## *Vertical Flow Media*

is used in lower layers where anti-plugging characteristics are most needed.

## **AccuPac<sup>®</sup>**

Cross Flow and Vertical Flow PVC Media in the same Trickling Filter Tower optimizes the benefits of both media types.

 **BRENTWOOD**  
INDUSTRIES

AccuPac® Mixed Media is the optimal configuration of PVC structured sheet media in biotowers for superior wastewater treatment. The Mixed Media concept combines the superior distribution properties of crossflow media with the reduced potential for clogging of vertical flow media, to give consistent and efficient

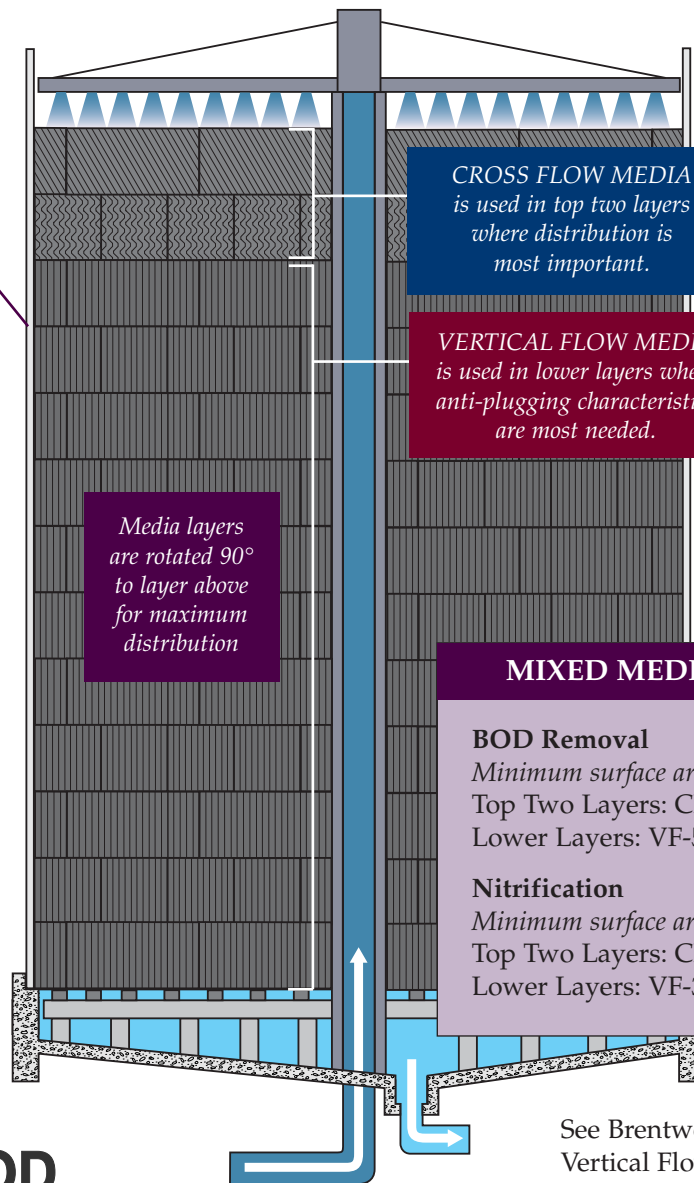
biological wastewater treatment. Mixed Media is ideal for use in the modern trickling filter that is designed for 16 feet or more of media depth. This configuration improves the mixing, hydraulics, surface area, ventilation, and physical strength of the media beyond that of either crossflow or vertical flow media alone.

Typical Mixed Media Trickling Filter Tower Configuration

Uniform distribution by Cross Flow layers ensures desired sheet flow in Vertical layers

### BENEFITS OF MIXED MEDIA

- Excellent distribution of wastewater over the surface of the filter due to the crossflow media in the top two layers.
- Reduced potential for excessive biomass buildup due to increased shearing in vertical layers.
- Thinner biofilm improves substrate removal efficiency of both carbonaceous and nitrogenous BOD.
- High oxygen transfer in the upper crossflow media where aerobic conditions are very important to BOD oxidation.
- Additional structural integrity due to the use of vertical flow media.



CROSS FLOW MEDIA is used in top two layers where distribution is most important.

VERTICAL FLOW MEDIA is used in lower layers where anti-plugging characteristics are most needed.

Media layers are rotated 90° to layer above for maximum distribution

### BRENTWOOD MEDIA MODULES

All trickling filter media modules are fabricated from rigid, self-extinguishing, un-plasticized PVC sheets. The material is resistant to rot, fungi, bacteria, acids, and alkalis commonly found in wastewater. UV protection is added to the top layer of filter media which may have extended exposure to sunlight.

### MIXED MEDIA APPLICATIONS

**BOD Removal**  
 Minimum surface area: 30 ft<sup>2</sup>/ft<sup>3</sup> (98 m<sup>2</sup>/m<sup>3</sup>)  
 Top Two Layers: CFS-3000 Cross Flow Media  
 Lower Layers: VF-5000 Vertical Flow Media

**Nitrification**  
 Minimum surface area: 40 ft<sup>2</sup>/ft<sup>3</sup> (131 m<sup>2</sup>/m<sup>3</sup>)  
 Top Two Layers: CF-1900 Cross Flow Media  
 Lower Layers: VF-3800 Vertical Flow Media

See Brentwood Cross Flow and Vertical Flow literature or our website for more specific product information.



Brentwood Industries, Inc.  
 Mailing Address P.O. Box 605, Reading, PA 19603, USA  
 Shipping Address 610 Morgantown Road, Reading, PA 19611  
 Phone 610.236.1100 Fax 610.736.1280  
 Email wwsales@brentwoodindustries.com  
 Website www.BrentwoodProcess.com