

# Filter Underdrains Product Profile

Benefit from Ovivo's years of experience in folded plate underdrain air scour systems with the improved media retaining design. This new design follows years of proven performance of the folded plate underdrains providing uniform distribution in low headloss gravity backwash systems and filter retrofits with pumped backwash systems.

Media retaining underdrain eliminates support gravel. The 0.25mm wide punched openings allow the filter media to sit directly on the underdrain and air scour laterals. Low profile design, 6 to 8 inch vertical height, and no support gravel allows deeper media stacks than previously considered with other underdrain designs.

Uniform introduction of air and water through separate conduits provides superior simultaneous air/water backwash. Simultaneous air/water cleaning of the filter is done over a short time period with low waterwash/ air rates resulting in reduced volume of wash water usage.

Separate uniform distribution of air and water provides the vigorous agitation required for effective media cleaning. Most other systems introduce air and water through the same orifices creating a surging action and non-uniform distribution of air and water resulting in irregular cleaning of the filter media.



## *Underdrain Retrofit*

Conventional alternating air/water backwash is also an available method of cleaning the filter media.

Gauge stainless steel design is strong and permanent. 16 gauge stainless steel folded plate underdrain and air scour laterals meet the most stringent structural requirements. All stainless steel construction is corrosion resistant and maintenance free.

Ideally suited for new designs or retrofits in existing filters. With fabricated underdrain, the flexibility exists to tailor the headloss to meet existing hydraulic conditions. Low profile design allows installation in the shallowest filters.

Easy to install, no critical construction tolerances. Folded plate underdrain air scour lateral system is simple to install requiring fewer installation man-hours than any other system.

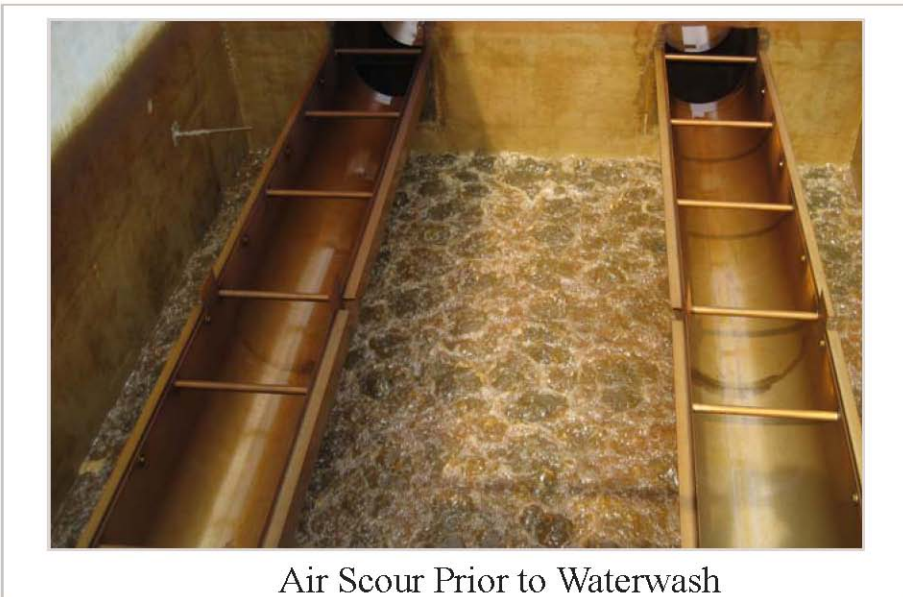
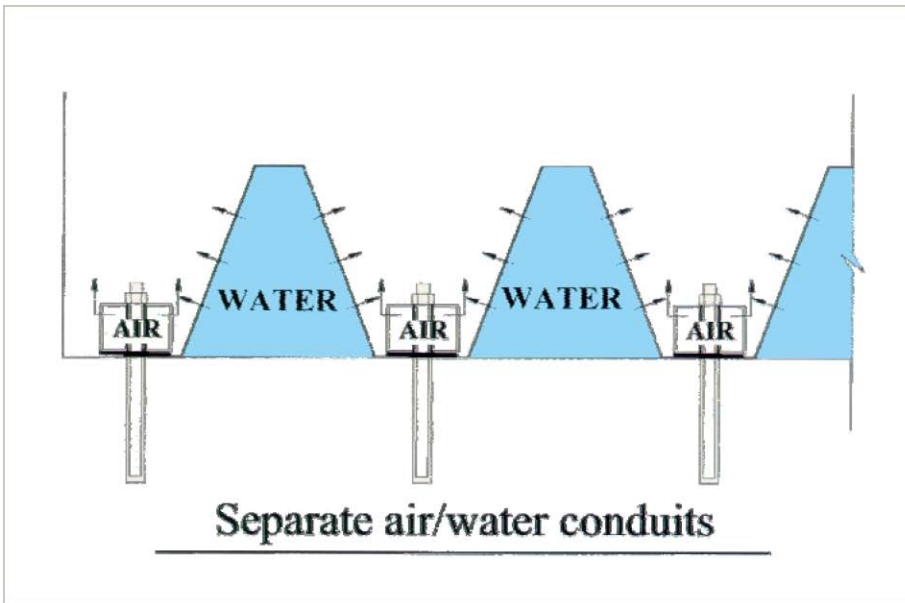
**FOR NEW INSTALLATION OR RETROFITS, IMPROVE YOUR FILTER WATER QUALITY WITH DEEPER MEDIA DEPTHS BY SELECTING THE MANUFACTURER WITH THE MOST EXPERIENCE IN FILTER UNDERDRAIN/AIR SCOUR SYSTEMS ON THE MARKET.**

## SPECIFICATIONS

**General Information** — The filter underdrains are stainless steel folded plate underdrains manufactured by Ovivo. The underdrain plates have punched openings that have been placed by Ovivo to provide optimum headloss characteristics for flow distribution during the filter and backwash cycles.

**Materials and Construction** — The filter underdrain plates are cold formed into a folded cross section from AISI Type 304 stainless steel sheets. The resulting cross section will provide the required stiffness for support and a low headloss lateral flow channel.

**Anchorage** — The folded plates are clamped and sealed to the concrete structure by means of clamping tubes overlapping the edge flanges of adjacent plates. The clamp tubes are secured to the floor with a series of Type 304 stainless steel anchors and epoxy capsules located at approximately 30" centers. The tubes are fabricated from AISI Type 304 stainless steel.



## OUR EXPERIENCE IS YOUR ASSURANCE OF QUALITY

Ovivo developed the original folded plate underdrain with air scour in 1980. The fine opening design incorporates the same design principles of above the underdrain air scour with separate conduits and premium materials that has provided 22 years of successful installations.

Contact us today so we can provide a design for your filter system and ask about other products we offer for municipal water treatment.

Your local sales representative:

Ovivo • 2404 Rutland Drive • Austin, Texas 78758 Tel: 512-834-6007 • Fax: 512-834-6039 •  
Email: [info.US@ovivowater.com](mailto:info.US@ovivowater.com) • Website: [www.ovivowater.com](http://www.ovivowater.com)