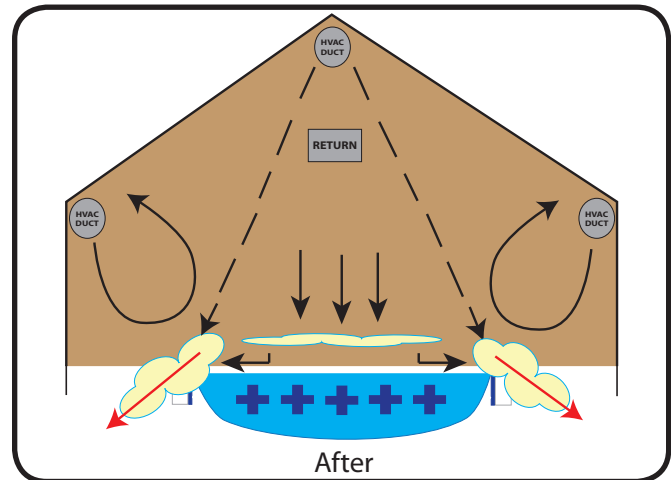
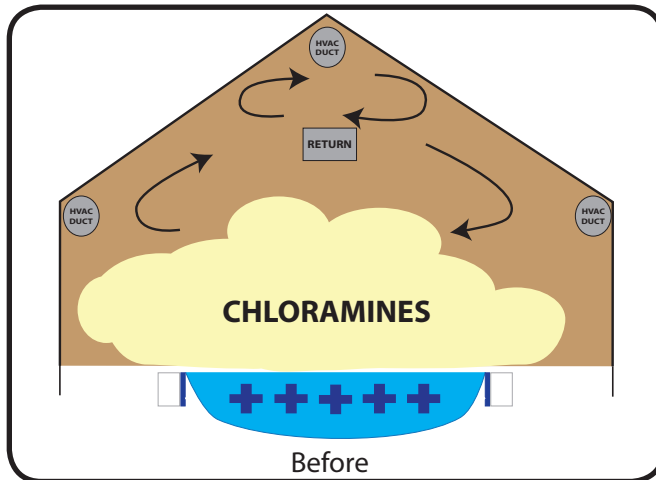


PADDOCK Evacuator



Patent Pending

BENEFITS OF THE EVACUATOR:

- The Evacuator removes high concentrations of airborne chloramines in the area directly above the pool water surface reducing the smell of chloramines throughout your facility.
- The reduced chloramine concentration improves the swimmers ability to process oxygen, which will translate into better performance by competitive swimmers.
- The Evacuator provides a much more desirable environment for patrons, competitive swimmers and facility staff. Seniors and patrons with respiratory issues enjoy the pools, rather than having to stay away due to the detrimental effects of excessive chloramines.
- The Evacuator reduces maintenance required for deck equipment and metal building components.
- The Evacuator utilizes type 316L Stainless Steel and PVC components.
- This is a **GREEN SYSTEM** and lends itself well for **LEED** accreditation as it reduces power consumption, provides improved air quality, and heat recovery from the air pulled off the pool water surface.
- The Evacuator reduces the dehumidification load of the “HVAC” system by evacuating high-humidity air from the surface of the pool where the humidity originates. This design of the overall equipment required for the project can represent a significant up front cost saving to the owner compared to the standard design criteria used in the Aquatics Industry today.
- The “HVAC” system runs less due to the reduction of humidity migration throughout the entire building plenum, particularly in off programming hours and reduces operating costs significantly. The operational costs of the facility will be additionally reduced by the recapture of heat from the exhausted air from the chloramine bubble.
- The Evacuator greatly extends the life of “HVAC” equipment and the building components by preventing heavy chloramine-laden air from attacking system components which in turn reduces the reserves required for future capitalization for repairs and replacement of facility components.



PADDOCK
Evacuator 
Chloramine Evacuation System

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SPECIFICATIONS

An air exhaust system shall be incorporated which by design shall tend to inhibit the mixing of the air which has come in contact with the surface of the water in the swimming pool with the balance of the air from the natatorium air handling system. This air, containing the bulk of the eye, nose and throat irritants, shall be separately captured and exhausted, leaving the balance of the air more healthful for instructors, coaches, swimmers and spectators.

The chemically saturated air shall be collected and discharged by a Paddock Evacuator™, an air exhaust system completely separate from the “HVAC” system which controls, heats, condition and re-circulates the natatorium air. Water captured by the Evacuator shall be separated from the air and discharged to waste. The exhaust air from the Evacuator shall be discharged outside the natatorium from a location which, under normal conditions, prevents it from reentering the natatorium air handling system.

The Evacuator system specified will reduce maintenance and corrosion on the deck equipment and metal appendages incorporated in the natatorium structure. This life extending benefit is inherent in the specified design as it promptly collects the chemically laden air which has been in contact with the swimming pool water surface and discharges this air, eliminating a large portion of the chloramines before they can cause corrosion inside the natatorium.

Prior to selecting the Paddock Evacuator™, a feasibility study will be made on its life extending capabilities, its effect on the design of the natatorium “HVAC” system and other equipment incorporated in the natatorium. Such a study, by a registered engineer, shall accompany any request for substitution.

The system supplied shall be a **Paddock Evacuator™** system, designed to exhaust air collected by a controlled entry plenum. The controlled entry plenum shall vary in size as calculated by the system engineer.

- a. The plenum shall be an integral chamber of the Swimming Pool Recirculation system. The plenum shall be fabricated from 316L stainless steel. The entry orifices shall be sized and spaced by the system engineer to provide a relatively uniform entry flow of air from all points on the perimeter. Prior to the discharge of air, any water collected by the system shall be separated from the air and disposed of as shown on the drawings.
- b. The plenum shall be installed in the deck adjacent to the back of the swimming pool wall. The plenum shall be fabricated 316L stainless steel and PVC. The entry into the plenum from the deck shall be through a PVC grating the opening designed by the system engineer to provide a relatively uniform entry of air from around the entire perimeter. Prior to the discharge of air, any water collected by the system shall be separated from the air and disposed of as shown on the drawings.

The plenum shall be connected to an exhaust fan designed to handle chloramine laden air, at the cfm's shown, to exhaust the collected air outside the natatorium structure and away from any intakes for the natatorium air handling system.

Optional: The discharge air shall be passed through an air to air heat exchanger to transfer the heat in the exhaust air to the air being taken in by the natatorium air handling system.