

## GLOSSARY

**Permanent-Medium Filter:** A filter that utilizes a medium, e.g. sand, that under normal use will not have to be replaced.

**Diatomaceous Earth Filter:** A filter that utilizes a thin coating of diatomaceous earth (DE) over a porous fabric as its filter medium that periodically must be replaced.

**Cartridge Filter:** A filter that utilizes a porous element that acts as a filter medium. The cartridge is disposable.

**Vacuum Filter:** A filter that operates under a vacuum from the suction of a pump. Cartridge and D.E. are the most common.)

**FILTER AGITATION** – The mechanical or manual movement to dislodge the filter aid and dirt from the filter element.

**FILTER AID** – A type of finely divided media used to coat a septum type filter, usually diatomaceous earth or volcanic ash. (Note: Alum, as used on the bed of a sand filter, is also referred to as a filter aid.) OR (Usually refers to powder-like substances such as diatomaceous earth or volcanic ash used to coat a septum-type filter. Typically used to aid sand filters.

**FILTER CARTRIDGE** – A filter which operates through a disposable cartridge. There are two general types: The surface or area type where the suspended matter is removed at the surface, and the depth type in which the interstices vary from large to small in depth. **FILTER CYCLE** – The operating time between cleaning or backwash cycles. OR (The operating time between cleaning and backwash cycles.)

**FILTER, DIATOMITE** – One designed to filter water through a thin layer of filter aid such as diatomaceous earth or volcanic ash. Diatomite filters may be of the Pressure, Gravity, Suction B Vacuum type.

**FILTER ELEMENT** – A device within a filter tank designed to entrap solids and conduct water to a manifold, collection header, pipe or similar conduit. A filter element usually consists of a septum and septum support. **Permanent Filter Medium:** A finely graded material (such as sand, anthracite, etc.) that removes filterable particles from the water. **Filter Aid:** A type of fine medium used to coat a septum type filter, usually diatomaceous earth, processed perlite or similar material. OR (A device within a filter tank designed to entrap solids and conduct water to a manifold, collection header, pipe or similar conduit and return it to the pool or spa. A filter element usually consists of a septum and septum support, or a cartridge.)

**FILTER, GRAVITY-SAND** – A filter with a layer of filter media (usually silica sand) supported on graded gravel through which water flows by gravity.

**FILTER MEDIA** – The finely graded material which entraps suspended particles (sand, anthracite, diatomaceous earth, etc.).

**FILTER, PRESSURE-SAND** – A sand filter enclosed in a tank to operate under pressure.

**FILTER ROCK** – Graded, rounded rock and/or gravel used to support filter media.

**FILTER, SAND** – A type of filter media composed of hard sharp silica, quartz, or similar particles with proper grading, or size and uniformity.

**FILTER SEPTUM** – That part of the filter element consisting of cloth, wire screen or other porous material on which the filter is deposited. **or Filter Septum:** The individual dividing members of a D.E. filter.

**FILTER, VACUUM (SUCTION)** – A filter which operates under a vacuum or from the suction side of a pump.

**FILTRATION** – The passage of a fluid through a porous medium to remove matter (particles) held in suspension.

**FILTRATION FLOW** – The rate of flow in volume per time (gpm, gph), through the filter system installed per manufacturer's instructions with a new, clean filter medium. OR (The designed rate of flow, in volume per time (gpm, gph) through the filter system.)

**FILTRATION RATE** – The rate of filtration of water through a filter during the filter cycle expressed in US gallons per minute per square foot of effective filter area. OR (The rate of filtration of water flowing through a filter during the filter cycle expressed in U.S. gallons per minute per square foot of effective filter area.)

**FINA** – The Federation Internationale de Natation Amateur - The governing body for intercollegiate competition including the Olympic games.

**FLOCCULATING AGENT** – A compound, such as one of the alums, which forms minute flakes in water which attract or enmesh small suspended particles. OR (A chemical substance or compound that promotes the combination, agglomeration, or coagulation of suspended particles in water.)

**FLOCCULATION** – Three-dimensional bridging of suspended particles followed by gravity settlement. A process of aggregation.

**FLOOR** – Shall refer to the interior bottom surface of a pool or spa, ranging from a horizontal plane up to a maximum of a 45° slope. **FLOOR SLOPE** – The slope in the pool floor, usually expressed in feet (or inches) at vertical rise in feet (or inches) off horizontal distance.

**FLOWMETER** – A metering device that measures flowrate.

**FLOWRATE** – The rate of flow through a recirculation system usually expressed in Combined Available Chlorine (CAC): Known also as chloramines, CAC are the undesirable compounds formed when insufficient levels of free available chlorine chemically react with ammonia and other nitrogenous compounds.

**FLUORINE** – The most highly electronegative element known. Its principle source is fluorite or fluorspar (CaF<sub>2</sub>).

**FREE AVAILABLE CHLORINE (FAC)** – Chlorine that is not combined. Defined as the sum of undissociated hypochlorous acid (HOCl) and dissociated hypochlorite anion (OCl<sup>-</sup>).

**FREEBOARD** – The clear vertical distance between the top of the filter medium and the lowest outlet of the upper distribution system - in a permanent medium filter. OR (The clear vertical distance between the top of the filter medium and the lowest outlet of the upper distribution system in a permanent medium filter.)

**FRICTION LOSS** – The friction or resistance between the inner surfaces of pipe and the water flowing through it.

**GALLONS PER MINUTE** – Expressed as gpm, refers to a quantity of water moving in a given period of time.

**GALVANIC ACTION** – Creation of an electrical current by electrochemical action.

**GUTTER FITTING (GUTTER DRAIN)** – A drainage fitting used in the overflow gutter.

**HALF-LIFE** – The time required for half of something to undergo a process such as the time required for a 1 ppm of ozone to decompose to 0.5 ppm ozone.

**HALOGEN** – Any element found in Group VIIA of the Periodic Table. The halogens include fluorine, chlorine, bromine, iodine, and astatine. Because of their tremendous chemical reactivity, the halogens never occur free in nature.

**HANDHOLD/HANDRAIL** – A permanently installed device that can be gripped by a bather for the purpose of resting and/or steadying him/herself. Is not limited to but may be located within or without the pool, spa or hot tub or as part of a set of steps or deck-installed equipment.

**HEAD** – The resistance or pressure in a system expressed in feet.

**HI-RATE PERMANENT MEDIA FILTER** – A filter using high velocity flow made possible by uniform distribution and collection of incoming and outgoing water.

**FILTER AGITATION — HI-RATE PERMANENT MEDIA FILTER**

**GLOSSARY**



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