



Eco Series Sand Filters

INSTALLATION AND OPERATING INSTRUCTIONS



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Information and specifications subject to change without notice.

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Capacity Tables

Dimensions With Valve Installed			
Model	Height	Width	Shipping Weight
Eco 550	790 mm	520 mm	13 kg
Eco 650	815 mm	639 mm	17 kg
Eco 750	940 mm	755 mm	28 kg

Model No.	Tank Diameter	Filter Area	Port Size	6 Hr. Turnover	8 Hr. Turnover	Media Req'd
Eco 550	550 mm	0.20 Sq M	40 mm	65,000 liters	85,000 liters	80 kg
Eco 650	650 mm	0.33 Sq M	40 mm	92,000 liters	120,000 liters	120 kg
Eco 750	750 mm	0.42 Sq M	50 mm	120,000 liters	160,000 liters	170 kg

GENERAL NOTES

1. When unpacking the filter be sure the unit is complete and no visible shipping damage has occurred.
2. Allow sufficient clearance around filter system for access and maintenance.
3. Provide adequate ventilation for pumping equipment, installed in conjunction with filter.
4. Provide solid mounting for filter and pump. If installed outdoors, install system on slab or solid concrete base to avoid risk of settlement. Filter systems once loaded with media can exceed a weight of 150kg.
5. Installation of filters and pumps should be located as close to the pool as possible to avoid excessive piping friction loss.
6. If system is installed below pool level it is important to install isolating valves to prevent risk of flooding in the event the pump or filter leaks.
7. The proper media selection is critical to good filter performance. Insure that the media is an approved Quartz Silica with a sizing range of 0.4 to 0.55mm.
8. The installation of filters requires no special tools.
9. Confirm that plumbing lines from pool are correctly identified. This will insure proper connection to markings on filter valve (i.e. "Pump", "Waste", " and "Return").

LOADING FILTER MEDIA

Once the filter system has been positioned, the installation of the filter media may be undertaken as follows:

1. Check filter size in order to determine necessary amount of media required.
2. Double check that the internal system consisting of a lateral hub and stand pipe are intact inside the tank.
3. Fill the tank half full with water.
4. Place the disposable metal loading disc in upper tank opening and, plastic cover over stand pipe to stabilize the filter stand pipe. It is important that the stand pipe remains centered through the media loading procedure to insure alignment with valve assembly opening.
5. Proceed to load correct volume of dry media slowly (if media is saturated loading can be difficult). Generally, a coffee can or funnel can aid in the loading process.
6. Once media is loaded discard sand loading disc and check to determine if stand pipe is properly centered in tank opening.

INSTALLATION OF SELECTOR VALVE

1. Following the media loading, clean any sand particles or debris from upper surface of tank opening.
2. Install six (6) position selector valve after placing **O-Ring** in cavity on underside of valve body. Place valve into tank opening while insuring that the **O-Ring** has remained in position.
3. Install selector valve into top tank opening and rotate valve to best suit plumbing lines. Once positioned, fit clamp band assembly around neck of filter and valve and tighten sufficiently for good engagement. **Note: It is not necessary to over tighten.**
4. Double check that incoming pool lines are connected to appropriate valve openings as marked on valve port (i.e. pump, return (pool) and waste).
5. The threaded openings on valve are 40mm or 50mm thread which all accommodate Hurlcon Barrel unions supplied with filter. O’ring are supplied to fit between the multiport valve and Barrel Union. It is only necessary do tighten by hand. **The use of Teflon tape is not required.**
6. Remove white plug from side wall of valve and install threaded pressure gauge using Teflon tape wrap (**do not over tighten**). Minimum hand tightening is adequate to provide a good seal.

VALVE OPERATION

The operation and the positions of valve settings are as follows:

Valve Settings Filter (also flow during vacuuming)	Direction of flow through Valve
Back Wash	From pump down through valve, through sand bed, up through stand pipe to valve and back through pool return.
Rinse	Flow from pump, through valve, down through sand bed, up through stand pipe, through valve to waste. (Position also used for initial start-up and leveling sand bed after Back-wash).
Waste	From pump, through valve to waste. Also position for lowering water level or assist in draining pool.
Closed	From pump to Valve without further circulation. Prevents any flow to filter and pool.
Recirculate	From Pump through valve, to pool. This position bi-passes filter and is used for circulation of pool water only.

NOTE: Always “STOP” pump when changing selector valve position to prevent damage to filter tank.

PUMP PRIMING

1. With the pump motor OFF, remove the lid from the pump strainer and pour approximately 4 liters of water.
2. Replace lid.
3. If the valve has been installed on the pump suction line, close before filling strainer. Open again after lid has been securely fastened in place. Any valves on the return lines should open. The pump should not need to be re-primed unless the pump has been drained for servicing, or winterizing (refer to complete pump operations manual provided with pump).

INITIAL START – UP

1. Make sure the correct amount of media is in the filter tank.
2. Prime Pump.
3. Set valve handle in BACK WASH position.
4. Start pump and operate in BACK WASH cycle for three (3) minutes. This will purge the filter of excess fines in the media.
5. Turn pump OFF and set valve handle to RINSE. Start pump and run for one (1) minute.
6. Stop pump and set valve handle to FILTER. Restart pump. System is not operating on a normal FILTER cycle.
7. Adjust the valves in the skimmer and main drain lines (if provided) to achieve balanced flow rates.
8. When a pool is filled initially, the filter may have to be BACK WASHED once a day until the water becomes sparkling clear. From that point on, BACK WASH when pressure gauge indicates 20 to 25 kPa higher than at starting pressure.

OPERATIONAL & INSTALLATION TIPS

1. Always turn pump “OFF” before changing valve positions.
2. Never run pump dry as it depends on water for lubrication.
3. Always maintain minimum water level ½ way up the skimmer mouth.
4. Clean pump strainer regularly.
5. Maintain a proper chemical balance in the pool.
6. Maximum operating pressure is 140 kPa.
7. Ensure pressure gauge on valve is positioned so that rain water cannot collect on glass face.
8. Back wash filter regularly for 5 minutes each time to ensure sand is completely cleaned.

WARRANTY

Your filter is covered by a limited pro rata ten year warranty against defective parts and manufacture. In field labour warranty is covered in capital city metropolitan areas or within a 20 km radius of an authorized Hurlcon service agent. For filters located outside this radius, a travelling time and kilometre charge is applicable. The valve and filter internals are covered by a 1 year warranty, while the filter tank is covered by a pro rata 10 year warranty. Should a tank failure occur during the first two years, it shall be replaced free of charge, between two and four years you will be charged 20% of the list price, four and six years 40%, six and eight years 60% and eight and ten years 80% of the list price. Hurlcon reserves the right to inspect all merchandise for compliance with warranty conditions and reserves the right to repair or replace defective parts. Hurlcon shall not be responsible for consequential damages of any kind whatsoever. Warranty does not cover accidental or deliberate misuse or abuse. The warranty is valid only while the filter is used in accordance with these instructions. Maximum operating pressure is 140 kPa.

Commercial Installations

On Commercial Installations, such as health clubs, motels/hotels and hydrotherapy, parts and in field labour warranty (within capital city metropolitan areas or 20km radius of authorized service agents) is ONE YEAR from the date of purchase.

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