

## PONDS, PUMPS AND FILTERS

### POND KITS AND PONDLESS KITS



Available in Section 1

### KITS INCLUDES:

- EPDM Liner and Underlay
- MicroSkin, MicroFalls
- AquaSurge 2000 Pump & Plumbing Assembly
- 25' of 1.5" Kink-Free Pipe
- Silicone Sealant, Complete Installation Instructions and
- Owners Manual

### MicroPondless™ Kit: 99769

**KIT INCLUDES: \$1,099.98**

- Microcentipde™ Module
- Microsnorkle™ Vault and Microfall™ Vault
- 2000 GPH pump
- 25' of 1.5" hosing
- Plumbing assembly
- 10' x 12' liner
- 10' x 10' underlay
- Instructions



Available in Section 2

### Pond Kits

**4 ft. x 6 ft. MicroPond™ Kit:**

8 ft. x 10 ft. Liner & underlay: **\$ 999.98**

**6 ft. x 8 ft. MicroPond™ Kit:**

10 ft. x 12 ft. Liner & underlay: **\$1,049.98**

**8 ft. x 11 ft. MicroPond™ Kit:**

12 ft. x 15 ft. Liner & underlay: **\$1,099.98**

**BECOME A V.I.P.  
BUY MORE - SAVE MORE  
5% - 10% - 15%**

**HUMBER LOYALTY DOLLARS  
SAVE EQUIVALENT OF 3%  
TOWARD FUTURE PURCHASES  
See flyer HU 120 for details**

### PondGard Fish Grade EPDM Rubber Liner from Firestone

- Meets all EPA standards for water safety.
- Extra heavy **45 mil** thickness.
- Resistant to sunlight (UV) damage.
- Charcoal gray color.
- Easy to splice, patch and repair.
- 20 Year Limited Warranty.

#### CUSTOM CUT LINER

- 10' WIDE - \$ 8.80 LI.FT. = 88¢ SQ.FT.
- 15' WIDE - \$13.20 LI.FT. = 88¢ SQ.FT.
- 20' WIDE - \$17.60 LI.FT. = 88¢ SQ.FT.
- 30' WIDE - \$26.40 LI.FT. = 88¢ SQ.FT.
- OR CUSTOM WIDTHS OF 40' OR 50' ANY LENGTH



#### GEOTEXTILE FELT UNDERLAY

##### CUSTOM CUT UNDERLAY

A cushioning material which protects the liner from punctures when installed between the soil and the liner. May also be used on top of the liner to protect from tears and ultraviolet rays.

- Nonwoven polyester fabric
- Minimal preparation
- UV stable
- Puncture/Tear resistant

**NOTE:** Due to the capillary action of this material, the felt must be kept below the water line when used inside the pond, to prevent draining

#### Determining correct Liner Size

1. Measure the **MAXIMUM** dimensions of your pond. \_\_\_\_\_ L = Length in feet  
 \_\_\_\_\_ D = Depth in feet  
 \_\_\_\_\_ W = Width in feet

2. Use the following formula to determine the correct liner or underlay size, by filling in your above numbers.

$(D \times 2) + L = \text{Liner length} + 2' \text{ for overlap} = \text{Final liner length.}$

$(\text{ } \times 2) + \text{ } = \text{ } + 2 = \text{ }$

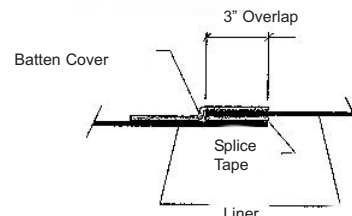
$(D \times 2) + W = \text{Liner Width} + 2' \text{ for overlap} = \text{Final liner width.}$

$(\text{ } \times 2) + \text{ } = \text{ } + 2 = \text{ }$

3. The liner you will require will be : Final Liner **Length** by Final Liner **Width**: \_\_\_\_\_ by \_\_\_\_\_

#### Splicing Procedure:

1. Clean area to be seamed with Seam Scrub and Quick Scrub Applicator.
2. Position splice tape (3" wide double sided tape as shown).
3. Cover seam with Batten Cover (6" wide single sided tape).



#### EXAMPLE:

- 8' L = Length
- 3' D = Depth
- 9' W = Width

$(3' \times 2) + 8 = 14' + 2 = 16'$  Final Liner Length

$(3' \times 2) + 9 = 15' + 2 = 17'$  Final Liner Width

Size of liner required: 16' by 17'



Available in Section 18 of our store

**Don't forget to attend our 10th Annual Pond Day, Saturday June 27, 2009**



### JOIN OUR AQUATIC EMAIL GROUP

by emailing us at [humber@gardencentre.com](mailto:humber@gardencentre.com). Don't forget to let us know it is for the Aquatic emailing list.

# WATER PUMPS

## AQUASCAPE STATUARY PUMPS

2 year warranty

MODEL	PRICE	FLOW RATE GPH	2'	4'	MAX. HEIGHT	WATTS	CORD LENGTH	OUTLET DIA."
98466	\$39.98	75	25	-	2'	5	6'	1/2"
98467	\$49.98	145	135	20	4'	9	6'	1/2"
98468	\$59.98	210	190	110	4'	12	6'	1/2"



## ULTRATM PUMP PERFORMANCE

MODEL	PRICE	FLOW RATE GPH	HEIGHT											MAX. HEIGHT	WATTS	CORD LENGTH	THREAD SIZE "
			1'	2'	3'	4'	5'	6'	8'	10'	12'	14'					
98457	\$139.98	350	350	320	300	250	200	150						7'	35	12'	1/2"
98458	\$159.98	500	500	440	400	350	310	250	70					8'	40	12'	1/2"
98459	\$189.98	750	750	710	670	620	580	500	350	180				11'	45	25'	3/4"
98460	\$219.98	1000	1000	940	900	850	800	740	600	480	280	80		14'	50	25'	3/4"
98461	\$259.98	1500	1500	1400	1290	1100	1000	950	900	800	750	650		21'	90	25'	3/4"
98462	\$299.98	2000	1995	1880	1680	1575	1523	1470	1365	1260	1155	840		25'	150	25'	3/4"



## AQUAFORCE SOLIDS HANDLING PUMPS

3 YEAR WARRANTY

MODEL	PRICE	0'	FLOW RATE GPH	3'	6'	9'	MAX. HEIGHT	WATTS	AMPS	INLET	DISCHARGE
99443 AquaForce 1000	\$219.98	1000	600	100	-	6.5'	50	.42	1"	1.5"	
99445 AquaForce 2000	\$289.98	2000	1500	1000	400	10'	110	.92	1"	1.5"	



## AQUASURGE PUMPS

3 YEAR WARRANTY

MODEL	PRICE	FLOW RATE GPH					MAX. HEIGHT	WATTS	INLET	DISCHARGE
		0'	5'	10'	15'	20'				
98125 AquaSurge 2000	\$429.98	1900	1500	1300	900	300	22'	250	1.25"	1.5"
99546 AquaSurge 3000	\$479.98	3328	2853	1902			15'	180	1.5"	1.5"
99547 AquaSurge 4000	\$529.98	3960	3300	2700	1426		16.5'	220	1.5"	1.5"
99548 AquaSurge 5000	\$579.98	4752	4280	3328	2377		19.5'	250	1.5"	1.5"
98484 AquaSurge 7000	\$799.98	6600	5100	4000	2800	1000	22'	700	1.5"	2"



## TSURUMI SUBMERSIBLE PUMP

2 year warranty

MODEL	PRICE	FLOW RATE (GPH)	WATTS	VOLTS	MAX AMPS	VERTICAL SHUT OFF	CORD LENGTH	DISCHARGE	HORSE POWER	SUGGESTED PIPE DIA.
29591 50PU-2.15S-63 (2PU)	\$449.98	3480	347	115	3.2	21'	20'	2"	1/5	2"
29493 50PN-2.25S (3PN)	\$599.98	3630	479	115	4.8	30'	32'	2"	1/3	2"
29494 50PM-2.4S (4PN)	\$729.98	4740	655	115	6.4	44'	32'	2"	1/2	2"
29495 50PN-2.75S (8PN)	\$899.98	5520	924	115	8.3	56'	32'	2"	1	2"



## LAGUNA

3 year pump warranty on all Laguna Pumps

(U.S.) GALLONS PER HOUR

POWERJET	PRICE	FLOW RATE GPH	1'	3'	5'	6'	7'	10'	12'	14'	MAX. HEIGHT	WATTS	CORD LENGTH	INLET DIA. DIVERTER	OUTLET DIA.
PJ 100 (PT320)	\$79.99	100	79								2' 7"	6.5	16'	var	1/2"
PJ 200 (PT322)	\$94.99	200	177	82							4' 3"	11	16'	3/4"	1/2"
PJ 600 (PT326)	\$139.99	600	515	351	137						5' 10"	32	16'	3/4-1 1/4"	1"
PJ 900 (PT328)	\$219.99	900	803	565	280	92					6' 4"	65	16'	3/4-1 1/4"	3/4-1 1/4"
PJ1500 (PT332)	\$279.99	1500	1532	1386	1215	1162	1056	700	449		13' 5"	100	16'	3/4-1 1/4"	3/4-1 1/4"
PJ2000 (PT334)	\$329.99	2000	1876	1690	1479	1373	1268	766	105		12' 2"	100	16'	3/4-1 1/4"	3/4-1 1/4"
PJ2400 (PT336)	\$349.99	2400	2298	2060	1796	1664	1479	924	132		12' 2"	100	16'	3/4-1 1/4"	3/4-1 1/4"
PJ2900 (PT338)	\$379.99	2900	2880	2631	2409	2251	2140	1744	1347	793	14' 9"	130	16'	3/4-1 1/4"	3/4-1 1/4"



# CHOOSING A PUMP

## The Importance of the Right Pump

The pump is one of the most important equipment purchases you will make for your water garden. It is the heart of the pond, circulating water to the filter and keeping the ecosystem healthy. Because it runs constantly, it must be both dependable and energy efficient.

## How to Select the Right Pump

To determine the correct pump for your pond you will have to measure the dimensions and distances of your pond and do the formulas below.

The first thing we need to do, is determine how many gallons of water your pond holds.

- Number of gallons in a **square** or **rectangular** pond (in feet) Length x Width x Average Depth x 7.5 = **Total Gallons**
- Number of gallons in a **round** pond .785 x (top diameter x bottom diameter x depth) x 7.5 = **Total Gallons**

**TOTAL GALLONS** \_\_\_\_\_

Because a healthy pond needs to circulate all of the water at least once every 2 hours, divide your total gallons by 2 to determine your circulation gallons per hour (GPH).

$$\text{Total Gallons} \div 2 = \text{Circulation GPH (US)}$$

If you **DO NOT** have a waterfall, stream or water feature, you can use your circulation (GPH) to find the correct pump on the previous page. Match your circulation (GPH) requirements to the flow rate of the various pumps. It is best to select a pump that matches or has a slightly higher rating.

Since most of us use waterfalls, streams or water features, we require more careful calculations to ensure we get the most out of our pond. Your pump should be located at the opposite end of the pond from the waterfall, which will lower it's output.

## When you have a waterfall or stream:

- Measure the distance from the pump to the top of the waterfall or the beginning of the stream = \_\_\_\_\_ feet.
- Measure the width of the waterfall/stream \_\_\_\_\_ inches (for every inch of width you need 75 - 250 (GPH) - 85 (GPH) per inch gives you a smooth stream effect - 250 (GPH) per inch produce a heavy rapids effect).

Take your waterfall/stream width \_\_\_\_\_ inches x your desired flow effect \_\_\_\_\_ (GPH) = Waterfall/Stream (GPH) \_\_\_\_\_.

Using your (A) measurement in feet, look at the chart on the previous page and match the distance, then look down the column and match your waterfall/stream (GPH), that give you the correct pump. Again, it is best to match your requirements or go slightly higher.

## When you have a waterfeature/fountain head:

Measure the distance from the pump to the top of the waterfeature/fountain, then using this measurement in feet look at the chart on the previous page and match the distance, then look down the column and match your waterfall/stream (GPH), that give you the correct pump. Again, it is best to match your requirements or go slightly higher.

If you also have a waterfall/stream and the waterfeature/fountain head measurement gets added together in feet.

FOUNTAIN HEAD MINIMUM - MAXIMUM DIMENSIONS			
LAGUNA PUMP	WATERBELL SPRAY DIAM.	3 TIER SPRAY HT.	DIAM.
PJ100	5-10"	19-29"	16-23"
PJ200	8-15"	12-28"	11-22"
PJ600	15-20"	26-40"	16-29"
PJ900	16-26"	26-50"	19-31"
PJ1500	20-40"	32-84"	32-48"
PJ2000	24-48"	36-102"	32-56"

MAXIMUM RECOMMENDED FLOW RATES FOR TUBING		Proper tubing sizing is vital for maximum pump performance. <u>Always</u> match your tubing size to the amount of water being pumped regardless of outlet size of the pump.
1/2"	480 GPH	
3/4"	900 GPH	
1"	1,500 GPH	
1 1/4"	2,700 GPH	
1 1/2"	3,600 GPH	
2"	5,400 GPH	
3"	13,500 GPH	

# MICROBE-LIFT BACTERIA



**16 oz**  
**\$21.99**

## Microbe-Lift PL

- Contains photosynthetic bacteria
- Creates a cleaner environment for your pond
- Improves fish health, growth and longevity
- Promotes cycling of pond including nitrate elimination
- Reduces cloudy water
- Dissolves away organic sludge
- Seeds and maintains biological filter
- Safe for wildlife and pets that may drink out of the pond



**32 oz**  
**\$28.99**

## SA Sludge-Away

Sludge Away is formulated specifically for the removal of organic bottom solids that are slow to degrade. Works faster at warm water temperatures, however may be used effectively at any temperature year-round. Recommended for use with all MICROBE-LIFT bacteria and enzyme products. Provides "rapid & natural sludge and much removal". 80% faster than competitive products. binds phosphate. Helps improve pond clarity. 100% natural active ingredients. Disperses quickly. Organic and microbial based.



**1 lb.**  
**\$37.99**

## Tac Totally Active Clarifier

MICROBE-LIFTS/TAC (totally active clarifier) dry bacterial cultures. specifically formulated to promote clean, clear pond water. eliminates organic matter. significantly improves water quality and appearance. Buffers/aids pH control. Promotes essential bio-film development. Promotes bio-filter performance. Beneficial to water plant root systems.



**AquaBasin™**

Large \$429.98  
Small \$269.98



**BARREL LINERS** 20 gal 25" x 15"



**Foaming Geyser Kit**

Instant pebble pond including reservoir, wire top screen, pump, 2 fountain heads.

PT236 \$159.99

**FORMAL RIGID SHAPED PONDS**

**RECTANGULAR**

60 gal/228L 42"x28.5"x12" H.D.P.E. 10 yr. warranty PT-788 \$79.99	71 gal/270L 51"x31.5"x18" H.D.P.E. 10 yr. warranty PT-795 \$159.99
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**Irregular rigid ponds are a special order.**

PLEASE ENQUIRE ON PRODUCT AND PRICING.

**How to choose a correct filter**

Most pumps in fact come with some sort of filter on them already. These can consist of plastic cages or foam blocks sometimes inside small cages.

- These filters may require daily cleaning.
- These filters are simply to protect your pump from solids that could damage them.

Choosing A Filter for Your Pond - Most manufacturers indicate on their filters what pond volume or fish load they support. Add these factors to your pond to determine the proper size filter.  
Average pond depth less than 2.6' - add 25% volume  
Pond located in full sun - add 25% volume

We are here to make your pond life easier and help you decide which filter best suits you and your pond.

- Mechanical filtration - particles are trapped in some type of media for removal during filter cleaning.
- Biological filtration - beneficial bacteria feed on impurities in the water, breaking down fish waste and other organic matter (that cause algae).
- Biological filters have a specific flow rate (G.P.H.). Proper flow rate allow the aerobic bacteria more exposure to the water to break down impurities. A fast flow may actually dislodge the bacteria from the filter. Do not turn off the biological filter for too long as the bacteria will die and emit toxins back into the pond. Spring start up and addition of fish or filters will require the addition of the beneficial bacteria to the pond.

Pressure filters are ideal for small to medium-sized ponds. They are generally fed water by a submersible pump that is positioned directly in the pond or in pond skimmer. A pressure filter is a sealed unit and therefore allows for installation flexibility. The unit can be positioned above the ground or partially buried, making it easily hidden in the landscape or behind a waterfall.

**SKIMMER FILTER & FILTER FALLS**

High efficiency pond filtration solutions. The Skimmer Filter is designed to use by itself or in combination with the Filter Falls. Both filters provide high efficiency filtration for both mechanical and biological filtration. Easy access for maintenance is an important feature of external filters, as well as, the ability to be camouflaged in a water garden setting.



**UltraKlean™**

**UltraKlean™ Pressurized Filters**

- Can be used above-ground or partially buried in the ground.
- Patented cyclone action increases efficiency
- Triple-action filter foam works from top, bottom and sides to minimize cleaning requirement.
- Large foam surface area provides increased filtration and room for bacteria growth.
- Plastic bio-media layer increases filtration and room for bacteria growth.
- Large band clamp for easy opening and closing.
- Convenient inlet/outlet hose barbs accommodate 3/4" to 1-1/2" tubing.



**UltraKlean™ Pressurized Filters without UV**

- #60024 UltraKlean™ 1000 gallon Case:4, Unit Weight: 9.5 lbs. **\$249.98**
- #60012 UltraKlean™ 2500 gallon Case:4, Unit Weight: 15.0 lbs. **\$399.98**
- #60014 UltraKlean™ 3500 gallon Case:4, Unit Weight: 16.5 lbs. **\$529.98**

**UltraKlean™ Pressurized Filters with UV**

- #60027 UltraKlean™ 1000 gallon- 9 watt Case:4, Unit Weight: 10.9 lbs. **\$429.98**
- #60013 UltraKlean™ 2500 gallon- 24 watt Case:4, Unit Weight: 17.5 lbs. **\$599.98**
- #60015 UltraKlean™ 3500 gallon- 25 watt Case:4, Unit Weight: 18.5 lbs. **\$729.98**

**UltraKlean™ Pressurized Filters Performance**

	Models without UV			Models with UV		
<b>(Gal)</b>	1000	2500	2500	1000	2500	3500
<b>Max Vol. (Gal)</b>	1000	2500	2500	1000	2500	3500
<b>Max Fish Stock</b>	100"	250"	350"	100"	250"	350"
<b>Max Flow (GPH)</b>	750	1500	1900	750	1500	1900

**UV STERILIZERS/ CLARIFIERS**

**\*Clear Water Guaranteed\***

- Corkscrew sleeve increase UV contact time and increases efficiency by 50%.
- Quartz sleeve protects bulb and maintains proper bulb temperature.
- Safe low voltage design includes 12 Volt transformer.
- Can be mounted horizontally or vertically with clamps provided.

MODEL	MODEL #	WATTS	RECOMMENDED GPH (FLOW RATE)	POND SIZE GAL	PRICE
Power Clear	PT1650	8	500	Up to 1,000	\$179.99
Power Clear	PT1655	25	1000	1,000 - 2,000	\$219.99
Power Clear	PT1660	55	1300	2,000 - 5,000	\$299.99

**FILTER CLEANING**

When to clean these filters - Mechanical filters should only be cleaned when they impede water flow or to help control ammonia nitrites from excess organics. Biological filters should only be cleaned at opening and closing (spring/fall). We never want to wash away our BUDDIES (BENEFICIAL BACTERIA). "A clean filter was a waste of money".

**UNDERWATER FILTERS**

Suited for small to medium ponds or prefilters for ponds utilizing an external filter. PT505 **\$109.99**



**HUMBER NURSERIES LTD.**

"Ontario's Largest Garden Centre"

"Where perfect ponds are created and maintained"

8386 Hwy. 50, Brampton, Ontario L6T 0A5

Tel: (416) 798-TREE (8733) Toronto Line Tel: (905) 794-0555 Fax: (905) 794-1311

Website: www.humburnurseries.com E-mail: humber@gardencentre.com