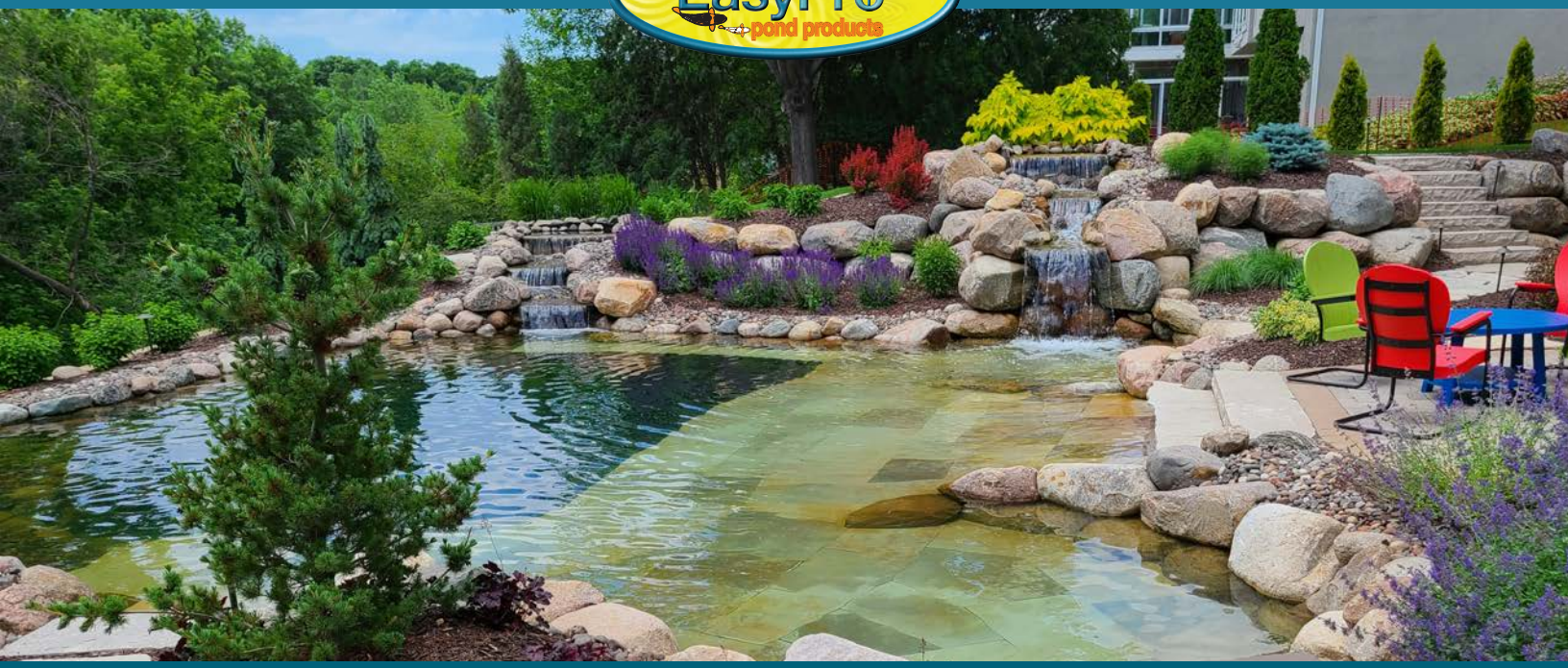
Recreational Pond Instructions

RPK2022



Components of a Rec Pond

PV-CUBE
Pit Viper™ Module

PV-COUP
Pit Viper™
Diffuser Connector

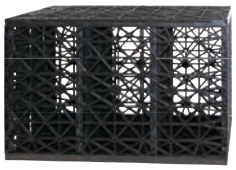
PV-CO410
4" to 10" Single Wall
Pit Viper™ Connector

PV-CAP10
Pit Viper™ End Cap

EBC44
EasyBog™ Cube

JAFIB4
Intake Bay Vault

CVA40IB
Intake Bay
Check Valve



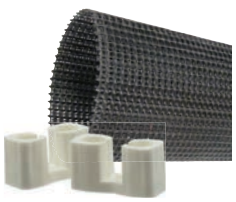
HSC44
High Strength Res-Cube

JAFM
Clean Out Vault

JAFME x2
Clean Out Vault Extension

SPVS270
Swim Rated Pump

FMV30
3" Flow Meter

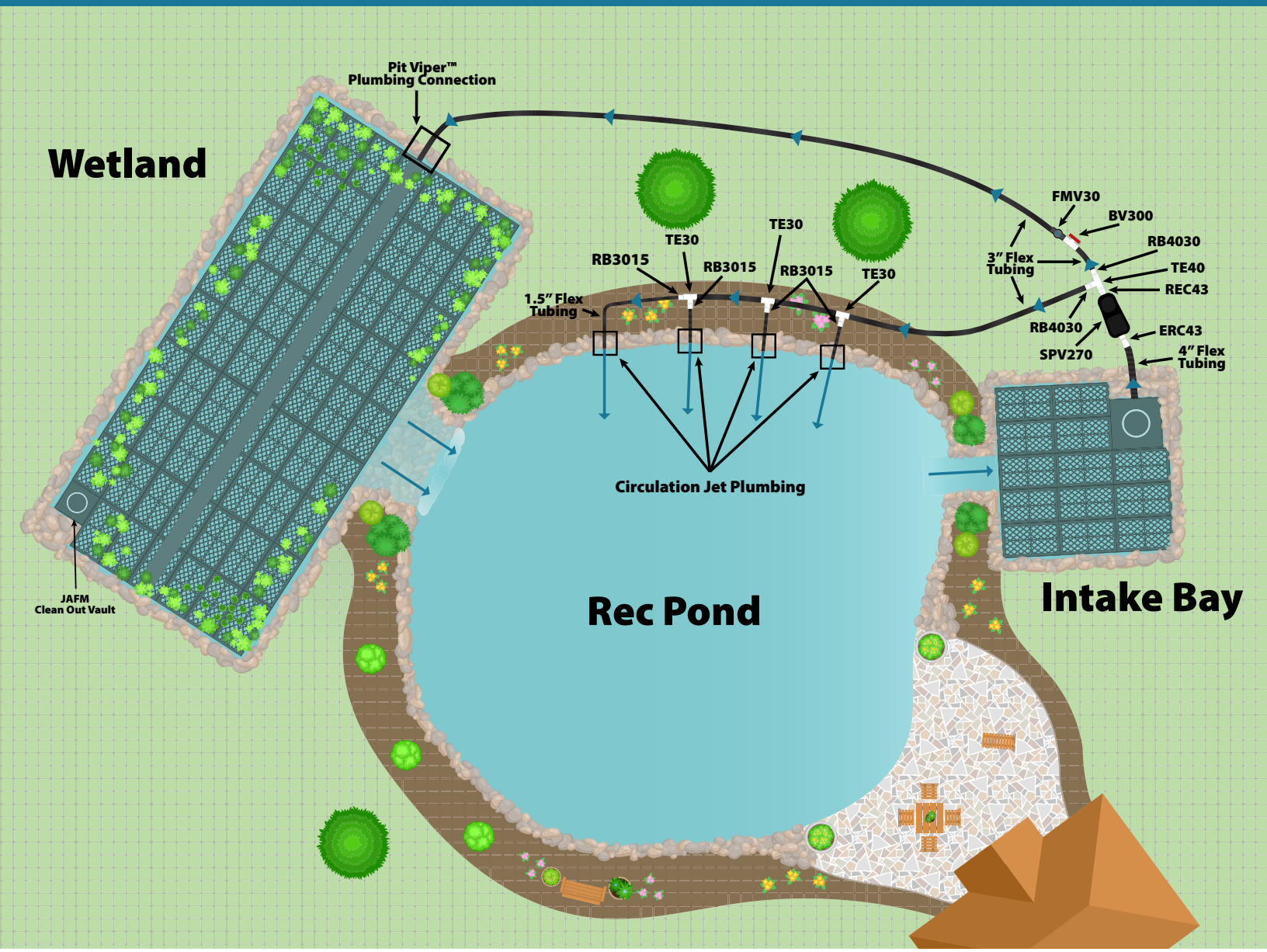


PN125 & HSCCLIP
Res-Cube Mesh & Clips

DuraLiner™
EPDM Pond Liner

DuraLiner™
Underlayment

RPK2022 Recreational Swim Pond Overview



Included in RPK2022

DuraLiner™ 45mil EPDM Liner	Wetland Clean Out Vault & 2 Extensions
10 oz. Liner Underlayment	Intake Bay System
(9) Pit Viper™ Diffuser Modules	Plumbing Package
2.7 hp SPVS270 Pump	3" Flow Meter
(62) EasyBog™ Cubes (with Media)	Screen Mesh
(66) HSC44 Res Cubes	5 lbs. EasyPro® Beneficial Bacteria

Planning, Excavation, & Liner

**Read and follow all equipment instructions. Always follow local and national codes.

1 Excavate the Pond

Pond Size: 20′ x 22′ x 6′

2 Excavate the Wetland Filter

Wetland Size: 10′ x 21′ x 4′

A. 4′ Minimum Depth. 3′ required for the **PV-CUBE** Pit Viper™ & **EBC44** EasyBog™ Cubes and 6″ minimum covering of stone and gravel to hide the cubes, plus 6″ of water over the wetland.

B. Over dig the length and width by 1′. This gives room for folds in the liner and plumbing connections to the Pit Viper™ (Step 18). *The Clean Out vault is recommended to be at a slightly lower elevation than the rest of the wetland.*

3 Excavate the Intake Bay

Intake Bay Size: 7′ x 8′ x 2.5′

2.5′ minimum depth. 17.5″ for the cubes and vaults, 4″ of gravel covering the intake bay and 6″ minimum of water over the gravel. Over dig by 6″ to account for folds in the liner.

4 Intake Channel to the Intake Bay

Intake Channel Width: 2.5′ Wide

Recommended 6″-1′ depth in the intake channel

5 Using DuraLiner™ EPDM Liner, Underlayment & Rock Pads

For Pond & Intake Bay: 50′ x 50′ Roll

For Wetland: 25′ x 35′ Panel

Make sure the wetland liner overlaps the pond liner above water level. If larger boulders are being used, DuraLiner™ Rock Pads are recommended to protect your liner .

Learn How The Wetland System Works Here!

Wetland Installation

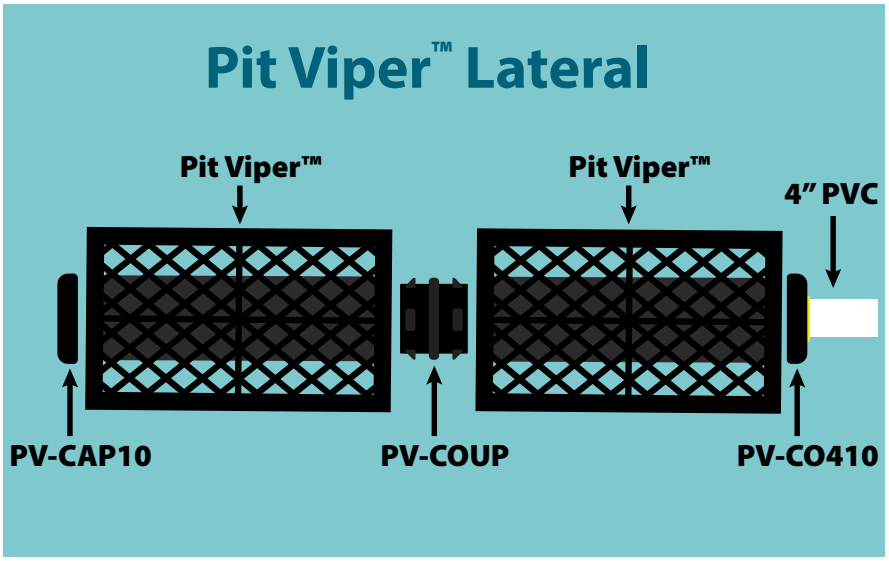
6 Create the Pit Viper™ Lateral

A. Layout the **PV-CUBE** Pit Viper™ lateral, centered in the longest length of the wetland.

B. Each Pit Viper™ cube connects with a 10″ coupling **PV-COUP.**

C. Water Enters the first Pit Viper™ through the 10″ x 4″ Cap **PV-CO410.** This is a friction fit where 4″ PVC slides into the yellow sleeve on the PV-CO410. This connection is made within the liner/ wetland.

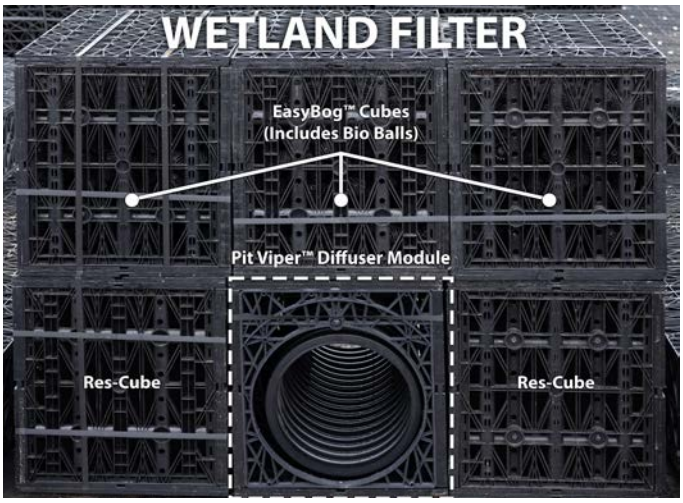
To make this connection, bring your plumbing up over the liner into the wetland and connect to the PV-CO410. (see illustration pg 5)

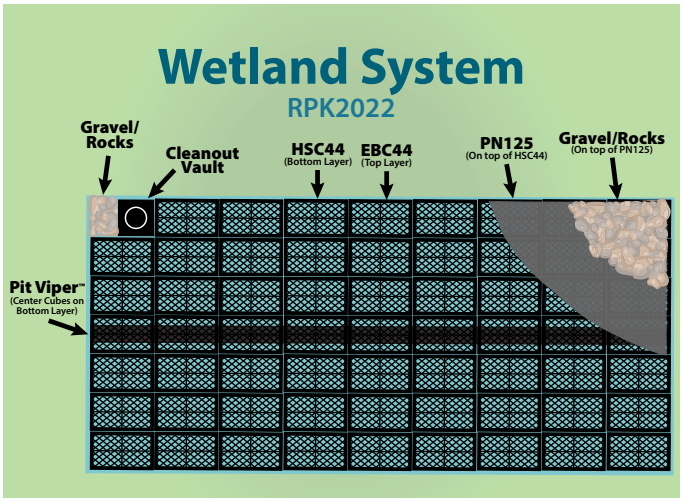


D. Install the 10″ cap, **PV-CAP10**, on the far side of the last Pit Viper™.

E. Use **HSCCLIPS** Res-Cube Clips to Secure all Pit Viper™ Modules, Res Cubes™ and EasyBog™ Cubes.

Wetland Installation Cont.





7 Install Empty HSC44 Res-Cubes, Next to the Pit Viper™ Lateral

Two cubes on each side of the Pit Viper™ lateral, for 7' x 9' grid (See *Wetland System* image to Left). Use clips to secure the Pit Viper™ Modules and Res-Cubes together.

8 Install JAFM (Clean Out Vault) in a Low Spot

Install two JAFME (Clean Out Vault Extensions) on JAFM.

9 Install the EasyBog™ Cubes

Install a layer of EasyBog™ Cubes over the lower layer of empty Res-Cubes and the Pit Viper™ Modules. Use clips to secure the EasyBog™ cubes together.

10 Install ¼" Plastic Mesh

11 Cover the Wetland with Stones & Gravel

Install a 6" layer of stones and gravel over the wetland.

12 Return Water Back to the Pond

A. Overlap the Wetland liner over the pond liner above water level. *If desired, seam the pond and wetland liners together.*

B. Using liner, stone and waterfall foam, create a waterfall or stream, to return filtered water to the pond

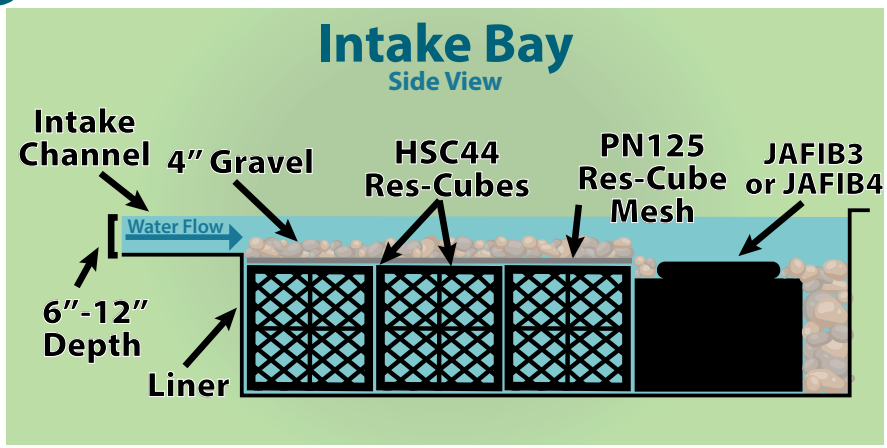
C. If a waterfall or stream is not desired, you can install the wetland just above water level and return the filtered water to the pond over a wider distance creating a calmer more serene setting.

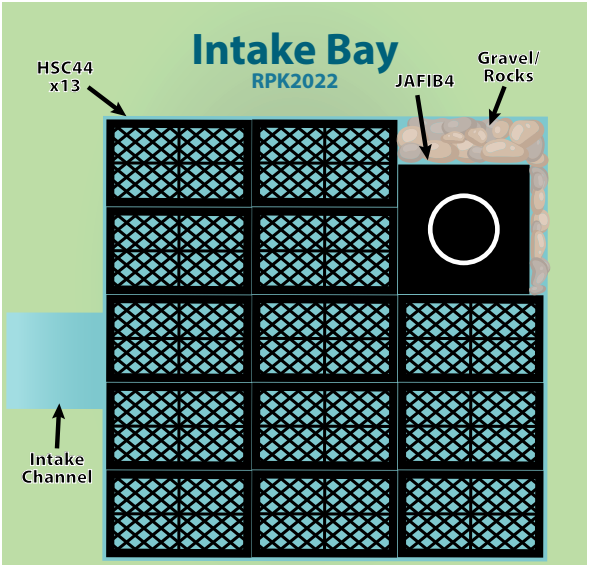
Intake Bay Installation

13 Install the HSC44 Res-Cubes, intake Bay Vault, and Check Valve Assembly

14 Install the PN125 Plastic Mesh Over the Cubes

15 Install Gravel and Stone Over the Intake Bay





Plumbing, Pump, & Jets Installation

16 Install the suction plumbing from the intake bay, to the pump

A. Using the rubber coupling on the intake bay check valve assembly, connect the suction line to the intake bay.

B. Using the union supplied with your pump, connect the suction line to the pump to 4" line.

C. Always make sure all suction plumbing is airtight and full of water before starting the pump.

D. Read and follow all pump instructions.

17 Install the discharge plumbing

Use a tee to split the main 4" discharge plumbing to two 3" lines. One line will feed the circulation jets, the other will feed the wetland filter. (see illustration on page 2)

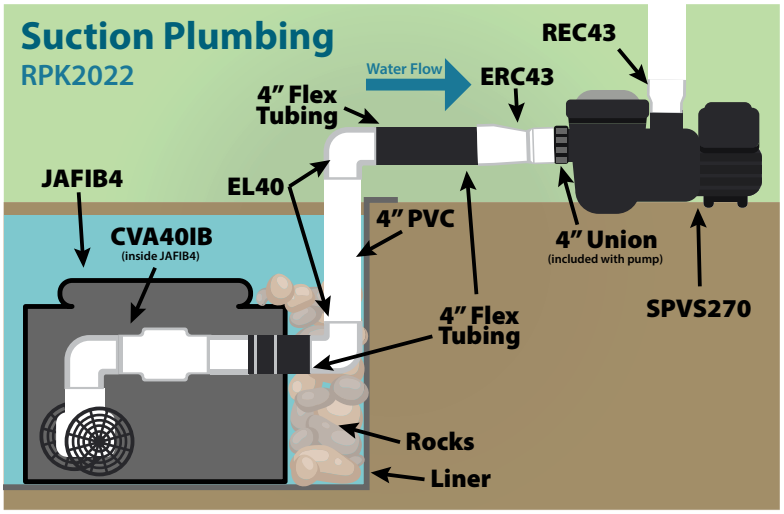
18 Plumbing the wetland filter

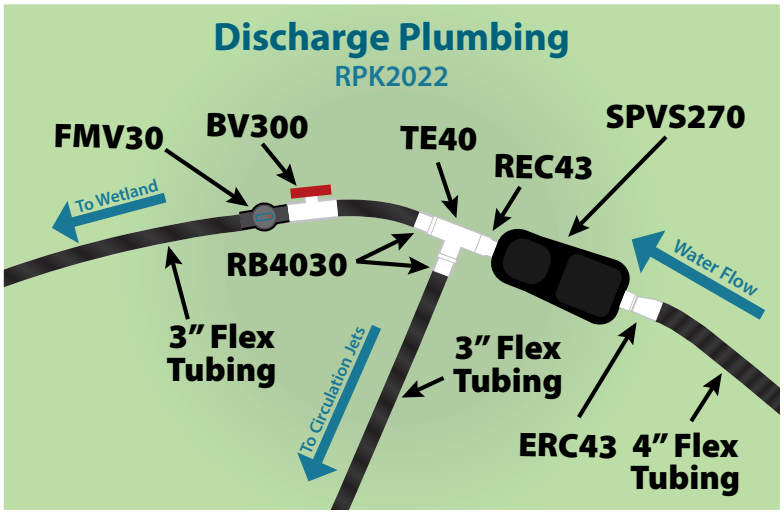
A. Install the flow meter on the line feeding the wetland. It can be located anywhere between the pump and wetland on the supply line running to the wetland.

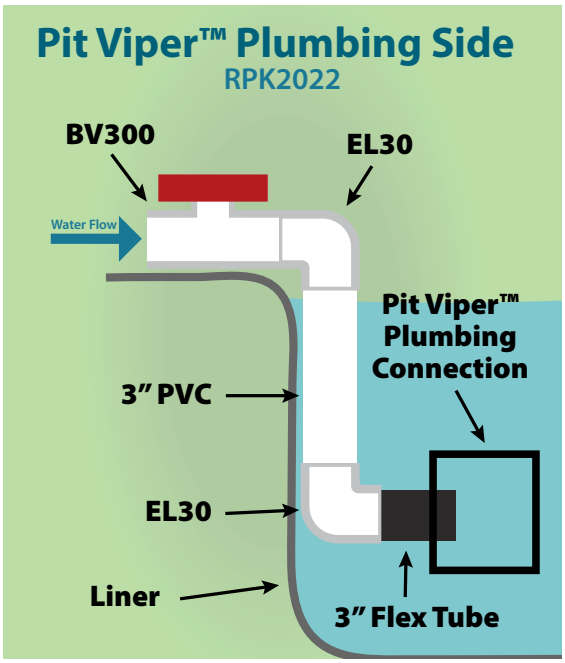
B. Install a ball valve before the flow meter. This will allow you to dial into the wetland's required flow rate.

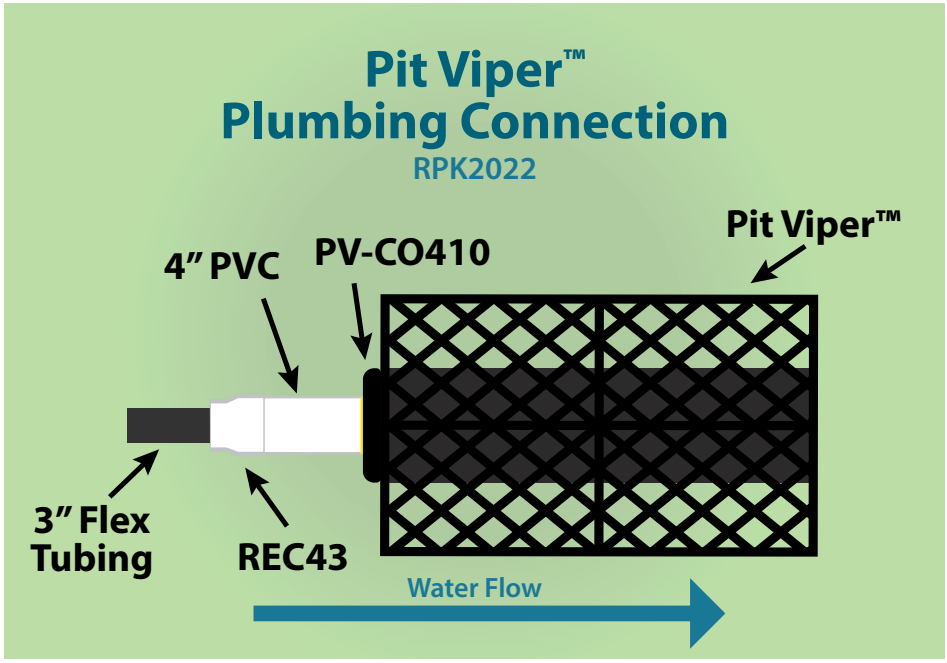
Flow Rate: 90 gpm

C. Connect to the supply line feeding the Pit Viper™ lateral in the wetland.







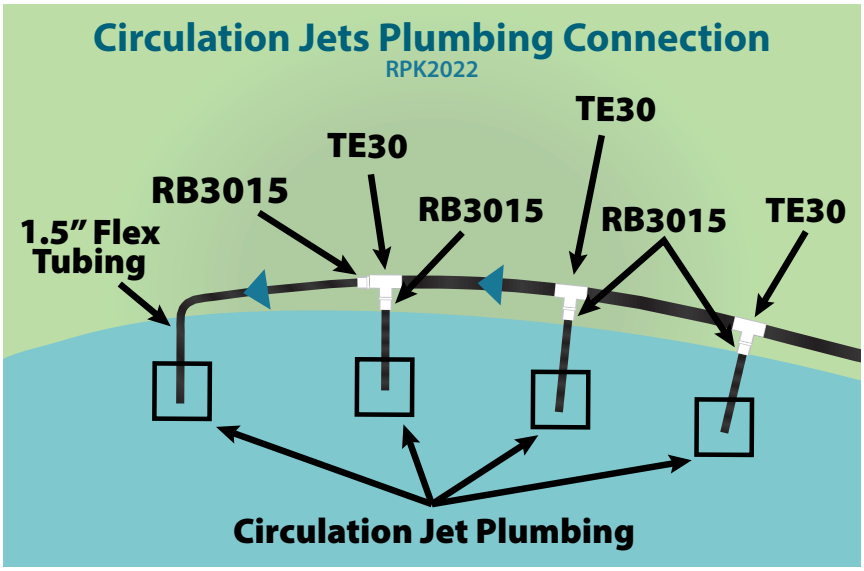


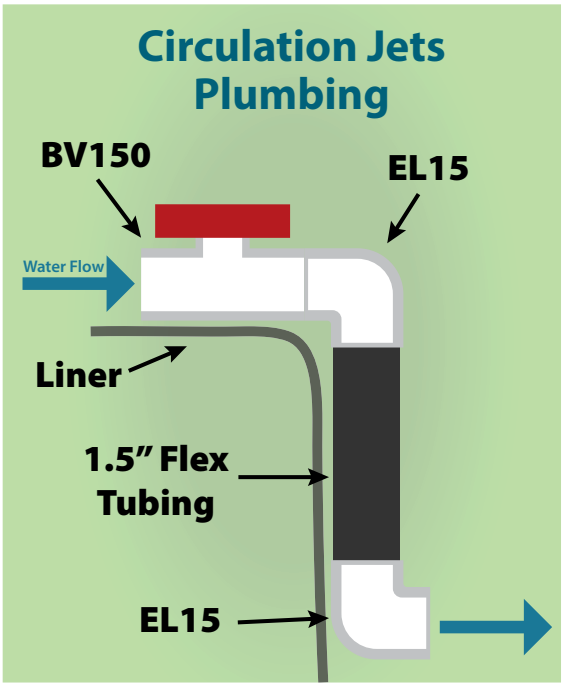
Plumbing, Pump, & Jets Installation Cont.

19 Plumbing the Circulation Jets

A. The jets are comprised of open 1.5" PVC.

B. Use tees, reducer bushings, and ball valves, plumb each jet from the main line supplying water to the jets. The ball valves are used to adjust flow to each jet. (see illustration below) Approximately 3,000 gph per jet.





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CL-CCSL


CL-OBTCC


CL-WL


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CL-BTEX

Add the Benefits of Aeration

Our best selling pond aeration for good reason! These kits are reliable, effective and affordable.

- Ensure adequate oxygen and circulation during hot summer months
- De-icing capability during freezing months
- Kits available for rec ponds, water gardens and koi ponds up to 30,000 gallons
- Quiet and energy efficient
- All kits include compressor with 6' power cord, rubber membrane diffuser(s), connectors and $^{3}/_{8}$" QuickSink™ tubing

LA1

KLC25 Compressor
23 watt / 1.3 cfm
Estimated operating cost: $1.51/mo.*

LA2

KLC40 Compressor
36 watt / 2.1 cfm
Estimated operating cost: $2.37/mo.*

LA3

KLC60 Compressor
60 watt / 3.1 cfm
Estimated operating cost: $3.94/mo.*

LA4

KLC80 Compressor
70 watt / 3.7 cfm
Estimated operating cost: $4.60/mo.*

SLC SOURCE LIGHTING BY CAST

Source Lighting® is professional grade landscape lighting made with the highest quality materials by CAST, the manufacturer of the world's most durable outdoor lighting. All fixtures are backed by industry-leading warranties.

CL-MLWL

CL-SFL10

CL-SBL10

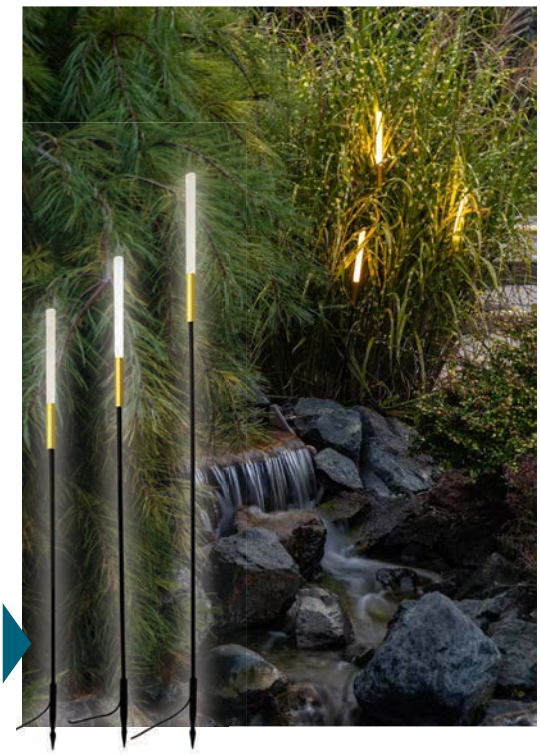
CL-AB18

CL-SUL20

CL-PSMR16

CL-AL675

CL-BBL3
2 Watt Bamboo Lights
Aluminum Stems with
Black Polyester Coated,
Textured Finish



Optional Accessories

Sludge Remover Beneficial Bacteria - SRB

Contains a proven blend of enzyme producing pond bacteria which naturally reduces odor causing, decomposing organic debris and muck. This product also contains barley straw powder which helps keep pond water clean. Packaged in water soluble packets that simply dissolve in the water for easy applications.

- Reduces toxic ammonia and nitrite
- Reduces problem causing nitrate and phosphate
- Reduces murky water caused by organic wastes
- Reduces organic bottom sludge (muck)
- Reduces odors
- Works in water temperatures down to 45° F

Liner Seam Kit - LSK

- Essential for connecting multiple liner pieces
- Contains three 2 oz. bottles of EPDM primer, one 25' roll of 3" double sided seam tape, one seam roller, one pair of latex gloves and scrubber pads

Water Fill Valve - WFS50

- Brass fill valves replace water lost from evaporation or splash.
- Ideal for skimmers, vaults, and water fill boxes (WFB) to maintain water levels.
- Heavy-duty brass body and rods offer superior durability compared to plastic fill valves.
- Adjustable valve rod (arm) for precise fit.

Folding, Telescoping Pond Net - EPFN

- Great all-around pond net for skimming leaves, catching fish, etc.
- Aluminum frame and handle are light weight and very strong
- Net measures 13" x 18" x 16" deep mesh and is flat along the front making it easier to catch fish
- 27" - 47" telescoping handle is super strong and folds for storage.

4" Bottom Drain Kit - BDK3N

- Heavy duty, roto-molded design offers superior strength
- Designed to connect bottom drain into skimmer box
- Kit includes bottom drain, 3" bulk head fitting, 3" valve and fittings (flex pipe sold separately)