## CALCULATIONS

## Rock Calculation for the POND

Length $x$ Width $\div 40=$ Tons of boulders
***Using a 1:2:1 ratio***
For every ( 1 TON) of $6^{\prime \prime}-12^{\prime \prime}$ rock, Get ( 2 TON) of $12^{\prime \prime}-18^{\prime \prime}$ and ( 1 TON) of 18"-24"

## Quantity of Boulders used in a STREAM

For Every 10' of STREAM = ( $11 / 2$ TON ) using 1:2:1 RATIO from above

## Quantity of GRAVEL Used in the POND

Pond Gravel $=30 \%$ total tons of pond boulders

## Quantity of GRAVEL Used in the STREAM

Stream Gravel $=30 \%$ total tons of STREAM Boulders

## Small MicroPond/ D.I.Y. Rock Calculation for the POND

Length $x$ Width $\div 65=$ Tons of boulders

## Small MicroPond / D.I.Y. Quantity of Boulders used in a STREAM

For Every $10^{\prime}$ of STREAM $=(1 / 2$ TON $) 6^{\prime \prime}-12^{\prime \prime} \&(1 / 2$ TON $) 12^{\prime \prime}-18^{\prime \prime}$

## Quantity of Boulders Used for the FACE of the BIOFALLS ${ }^{\circledR}$

Mini / Signature BIOFALLS ${ }^{\circledR}$ filter $=(1 \mathrm{TON})$ will cover the face of the falls
Standard BIOFALL ${ }^{\otimes}$ filter $=\left(1 \frac{1}{2}\right.$ TON) will cover the face of the falls
Grande BIOFALLS ${ }^{\circledR}$ filter $=(3$ TON $)$ will cover the face of the falls

## Quantity of Stone Used in the A.D.I. PONDLESS BASIN

Length x Width $\times$ Depth $=$ CUBIC FT.

- 90 lbs. of rock per (1) cubic foot ( $4^{\prime \prime}-6^{\prime \prime}$ and/or $1 \frac{1}{2 \prime}$ - $2^{\prime \prime}$ rock)
- Minimum $40 \%$ of 4 " $-6^{\prime \prime}$ rock, $60 \%$ of $11 / 2^{\prime \prime}-2^{\prime \prime}$ and then any additional decorative gravel for on top


## Quantity of Stone Used in the MICRO PONDLESS BASIN

Length x Width x Depth $=$ CUBIC FT.

- 90 lbs . of rock per (1) cubic foot ( $11 / 2^{\prime \prime}-2^{\prime \prime}$ only)


## Quantity of Boulders to use around the perimeter of the BASIN

( $1 / 2$ TON) $6^{\prime \prime}-12^{\prime \prime}$ Stone will cover 20 linear feet of edge
( $1 / 2$ TON) $12^{\prime \prime}-18^{\prime \prime}$ Stone will cover 5 linear feet of edge

## Quantity of Stone Used in a WETLAND FILTER (PER 10ft. ${ }^{2}$ )

750 lbs. 4" - 6" River Gravel
900 lbs. $11 / 2^{\prime \prime}-2^{\prime \prime}$ River Gravel
900 lbs. $1 / 2^{\prime \prime}-3 / 4^{\prime \prime}$ River Gravel

## Quantity of Boulders Used for RETAINING WALL

( 1 TON) of $12^{\prime \prime}-18^{\prime \prime}$ size rock will cover 10 linear feet
( 1 TON) of $18^{\prime \prime}-24^{\prime \prime}$ size rock will cover 5 linear feet

## Approximate Gallons of Water in a POND

Length $\times$ Width $\times 80 \% \times$ Avg. Depth $\times 7.48=$ total gallons
$* * *$ the basin takes up approximately $80 \%$ of the actual SQ. FT.
Approximate Gallons of Water in a STREAM
Length $\times$ Width $\times .25$ (Depth) $\times 7.48=$ Gallons in the stream.

## Approximate Gallons of Water in a PONDLESS BASIN

Length $\times$ Width $\times 80 \% \times$ Depth $\times 2.2=$ Gallons in the Basin
$* * * *$ You need $2 x$ the amount of water in your basin $* * * *$

## Electrical Consumption / Conversions

Amps $\times$ Volts $\div 1,000 \times .10$ (kw/perhour) $\times 24$ hrs $\times 30.4$ days $=$ Monthly Cost
Watts = volts $x$ amps
Amps $=$ watts $\div$ volts

