



CROPKING

— INCORPORATED —



2017

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Thanks to you, our loyal customers, CropKing has been a leader in the controlled environment hydroponic industry for 35 years. Your support nourishes our growth and in return, we want to be an invaluable resource for your agricultural journey. From basic questions regarding hydroponics to the toughest technical emergencies, our experienced staff is here to assist. We want to ensure the success of every customer, big or small, which is why we offer quality products and unbeatable service.

Our Two-Day Grower Workshops provide unique and valuable learning opportunities for experienced and prospective growers alike. Attendees receive a foundation in hydroponics, horticulture, and the controlled environment agriculture market along with hands-on time in a production greenhouse. If two days wasn't long enough to spend with the CropKing team, we also offer a new Intensive Workshop. This five day immersive course provides expanded practical experience working in a production greenhouse featuring a larger emphasis in hands-on work with the plants and growing systems. The content covered in our Intensive Workshop will be tailored to the individual's skill and experience level. Participants will receive small group (2-person max) instruction and guidance with the end goal of fostering a greater understanding of the inner workings of a hydroponic greenhouse and the various disciplines involved in a successful operation.

Since 1982, our goal at CropKing has been to help growers get started, succeed and expand. You are the reason we work so hard to continue to achieve this goal, and we look forward to building a lasting relationship.

Sincerely,
Your CropKing Family

FOLLOW US ON SOCIAL MEDIA



CropKing's High Tunnel and the NRCS Grant

Recently CropKing sold a High Tunnel to a customer in West Virginia who had received the NRCS grant. This is what she had to say about it...

"I had my inspection yesterday and the NRCS said it was the best constructed one they'd seen. They also said it was the best high tunnel package they'd ever seen. They were impressed. They took a CropKing Catalog to have in the NRCS office. So glad I chose CropKing for my supplier."



CropKing 10 Bato Bucket

System Includes:

- Sturdy Aluminum Stand
- Feed and Drain Plumbing
- 10 Bato Buckets with Elbows
- Active Aqua Pump 400 GPH
- Perlite Growing Media
- 25 Gallon Tank with Lid
- Digital Timer
- Bato Bucket Covers
- Adjustable Feet for Leveling
- Assembly Instructions



CropKing 10 Bato Bucket Item BAT0010 \$695.00



Overall footprint: 10' 4" x 22" x 26" LWH
Recirculating System

ACCESSORIES		
DESCRIPTION	ITEM #	PRICE
BlueLab Combo Meter	PHM3000	\$199.00
PH Control Kit	PHT4000	\$17.20
5 Pounds Vine Crop HydroGro A	FER3022	\$19.00
5 pounds Calcium Nitrate	FER3025	\$7.00
1 pound Potassium Nitrate	FER3012	\$5.10
Rockwool AO 36/40 Pad	ROC1008	\$10.00
10/20 Seed Tray	TRA1101	\$1.40
100 Vine Clips	VIN8003	\$5.00
20 Bato Bobbins	TOM1015	\$10.00
<i>Hydroponic Tomatoes by Howard M. Resh</i>	BOO0042	\$16.00

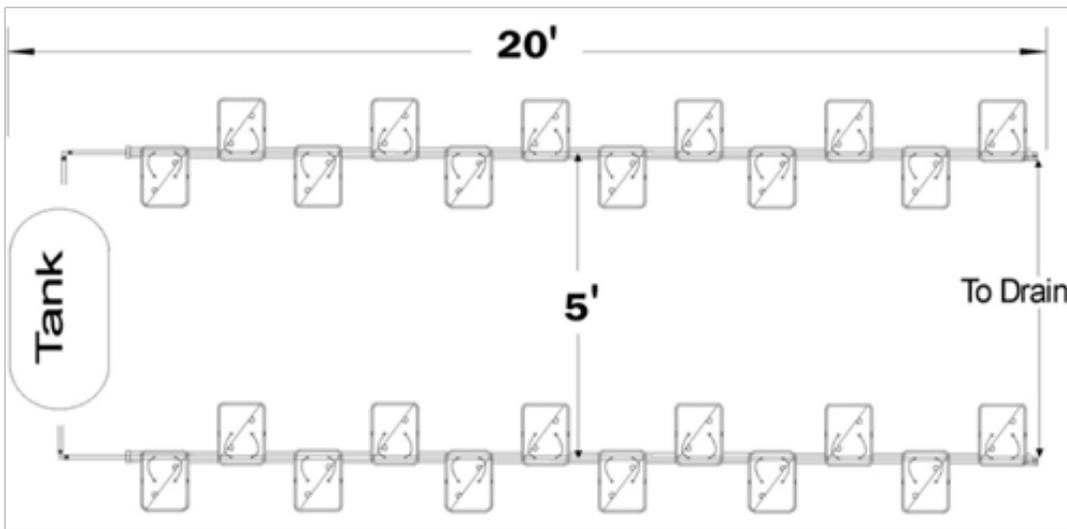
CropKing 24 Bato Bucket

Grow over 1000 pounds of vine ripe fresh tomatoes per year in this commercial style system! This is an ideal system for growing crops such as tomatoes, cucumbers, eggplants and peppers. Each perlite filled Bato bucket holds one or two plants, and is fed hydroponic nutrients from a provided 100 gallon nutrient tank. The long life, tan colored, plastic Bato buckets have a special reservoir and elbow drainage system to provide the correct moisture level and nutrient gradient for optimal root health.

The Bato Bucket System is comprised of 16 foot long double rows, with 12 buckets in each row. The buckets rest on the provided drain lines. The system is normally setup as a “drain to waste” commercial style system where the excess nutrient solution flows through the two inch drain line down the center of the system into a drain, but it can also be setup as a recirculating system by burying the nutrient feed tank, and sloping the drains back to the tank.

The Bato Bucket Growing System includes 24 buckets with elbows, a 100 gallon nutrient tank, an electronic timer, a feed pump, a filter, distribution and drainage plumbing, hardware, and perlite growing media. A minimum greenhouse footprint of approximately 12 feet by 20 feet will be needed to access all sides of the plants.

Item BAT0024 \$1295.00



ACCESSORIES		
DESCRIPTION	ITEM #	PRICE
Plant Support Package 100 ft of cable, Bato bobbins, turnbuckles for two rows of plants Vine crops may require plant support	BAT0024PS	\$167.00
50 pound Vine Crop Hydro-Gro	FER1000	\$126.00
50 pound Calcium Nitrate	FER3014	\$29.95
5 Pound Potassium Nitrate	FER3012	\$25.50
BlueLab Combo Meter	PHM3000	\$199.00
Rockwool AO 36/40 Pad	ROC1008	\$10.00
10/20 Seed Tray	TRA1100	\$1.40
10/20 Seed Tray without Holes	TRA1101	\$1.40
200 Vine Clips	VIN8003	\$10.00

CROPKING NUTRIENT INJECTOR SYSTEM

The CropKing Nutrient Injector System is the ideal way to precisely control nutrient and PH levels in your hydroponic system. Designed with the grower in mind, our injector system is simple to use and is built with the highest quality parts for reliability and minimal maintenance. PVC and corrosion-resistant components are used throughout. The system offers the consistency of a reservoir setup and the convenience of a direct injection system.

The CropKing Nutrient Injection System comes completely assembled and mounted on a steel frame. It is pressure tested before leaving our manufacturing facility. Installation is simple with PVC union connectors on the water supply side and the nutrient solution side. The system also includes a bypass kit to aid in system cleanup and emergency situations. For added security, the CropKing Nutrient Injector System comes equipped with an alarm kit to alert the grower if a loss of pressure is detected. The alarm can connect to a Sensaphone to call and alert the grower, or can activate a (customer supplied) 115 volt flashing light or buzzer.



All electrical connections are clearly marked in the drip-proof system control box. Complete electrical diagrams are provided with each system. The CropKing Nutrient Injection System's control panel features manual and automatic switches with indicator lights for all functions. The system is compatible with any type of 24-volt AC irrigation controller. The CropKing Injection systems will supply up to 17 GPM at 24PSI of nutrient solution to the irrigation system with up to 4 irrigation zones. Standard injection ratio designed at 1 to 100 with three injection heads. **Nutrient Concentrate Tanks (3) purchased separately, See page 42. If you do not have an iGrow you will need a digital timer page 42.**

2 Zone Nutrient Injection System

Item **FERT202** Each \$3495.00

4 Zone Nutrient Injection System

Item **FERT204** Each \$3549.00

REPLACEMENT PARTS

Elbow Connector, 2 Pack

Item **GOR1027** Each \$22.50

Poppet Valve includes 2 valves, 2 o-rings, 3/4 inch diameter

Item **GOR1021** Each \$46.75

1 inch Bellows

Item **GOR1024** Each \$37.50

1-1/2 inch Bellows

Item **GOR1008** Each \$39.00

O-Ring, 1-1/2 inch Bellows

Item **GOR1020** Each \$6.75

Displacement Cup, 1 inch Bellows

Item **GOR1001** Each \$12.00

Displacement Cup, 1-1/2 inch Bellows

Item **GOR1019** Each \$16.00

Crank Assembly

Item **GOR1100** Each \$50.00

Float Switch Upper RS-5 Assembly

Item **FLO7000A** Each \$58.75

Float Switch Lower RS-5 Assembly

Item **FLO7000** Each \$48.25

Pump Body Assembly

Item **GOR1003** Each \$176.00

1-1/2 inch Valve Body, no screws

Item **GOR1040** Each \$14.00

Suction Filter

Item **GOR0005** Each \$4.50

Barbed Fitting (tubing attachment of suction fitting)

Item **GOR0006** Each \$1.21

1/4 inch Delivery Tube, 1 Foot

Item **GOR0001** Each \$0.47

1/4 inch Nylon Check Valve

Item **PLLCANVC-FF** Each \$1.30

52 Gallon Mixing Tank with Lid, Blue

Item **TAN3000** Each \$189.95

1 inch Solenoid Valve, Nylon Electric PBI 2-Way Valves, 24 Volt, PVC

Item **SOL4000** Each \$31.00

Three Head Bellow Pump

Item **PUM6000** Each \$592.00

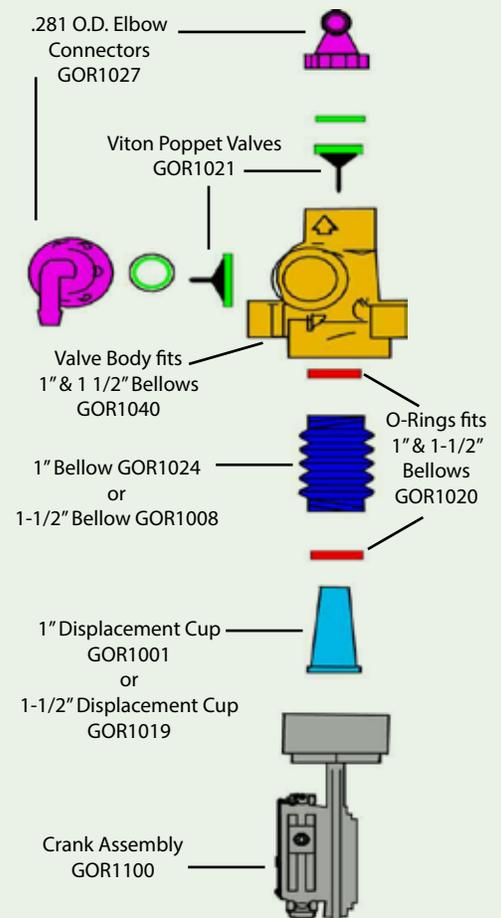
One Head Bellow Pump

Item **PUM6001** Each \$353.80

Gear Motor Kit includes motor for bellows pump, fan, mounting screws, ground set screws and all assembled.

Item **GOR1012** Each \$310.00

Bellows Breakdown



BATO BUCKET - TOMATO AND VINE CROP PRODUCTION

Bato Bucket Growing System

With many years experience in the Hydroponic field, CropKing is a leader in growing system solutions. We offer the most practical and cost effective vine crop systems for hydroponic farming. Over the years we have improved, developed, and upgraded both the equipment and the growing system. The importance CropKing places on the bottom line and complete satisfaction of our growers is unsurpassed in the industry. We feel there is no better advertisement than a profitable, happy grower.

For vine crop production, we recommend the Dutch or Bato Bucket Growing System. Bato Buckets are UV resistant, strong plastic containers that can be used repeatedly for years to come. The Bato bucket offers quality, as well as security when growing high value crops. Each bucket is formed with a small reservoir to help avoid over or under watering your plants.



CropKing 4-Bay in Mississippi

Other features of our Commercial Bato Bucket System:

Triple Injection System: Includes three concentrate tanks, (for Micro Nutrients, Macro Nutrients, and pH control), a mixing tank, pressure gauge, solenoid valve, plumbing kit and pump. (all pre-assembled, mounted and tested)

Bato Bucket and Nutrient Delivery: The Bato Bucket system is suitable for longer growing, fruiting crops such as tomatoes, cucumbers, peppers, eggplant, melon and a few other crops. CropKing's Bato Bucket system uses horticulture grade perlite as a growing media because it is clean and has great wicking capability. Rather than black plastic, our Bato Buckets are made of tan plastic to help maintain a cooler root zone. This is very important on a hot, sunny day in the greenhouse. Other parts of the System include, pre-cut and drilled drain line that fits directly under the buckets, drip irrigation plumbing with pressure compensated emitters (1 per plant, 2 per bucket), ½ inch poly feed tube, and emitter tubing.

Computerized Environmental Controls: The iGROW Control System is the brain of the greenhouse. This dedicated unit controls all the environmental equipment in the greenhouse including fans, heaters, vent door, wet wall, lights and CO₂. Maintaining the proper plant environment in your greenhouse is critical to growing a successful crop. This system measures both temperature and humidity of the greenhouse and adjusts the equipment to maintain the correct set points. These precision controls allow you to improve crop quality, reduce equipment usage, and lower your energy costs. For added security, this system is capable of alarm auto-dialing to alert you if there is an issue in your greenhouse. The iGrow Control System has on-screen programming for easy tracking and adjustment of the environment. There are 12 outputs with LED status display indicators and manual over-ride switches. With the addition of "slave units" the iGrow system can be expanded.



Electrical Panel: To help make sure everything works properly, CropKing provides a pre-wired electrical panel that has been tailored to your greenhouse needs. The breaker panel is mounted on a white painted board, along with the relay box, and the iGrow controller(s). All of these come pre-wired together and terminal strips are provided to connect the greenhouse equipment. This pre-wired panel makes installation so much easier, and saves money over building a panel on site. Just connect the panel to the incoming power source in your greenhouse. Run wire from your greenhouse equipment to the provided terminal strips on the panel. The wiring for this system can be complicated and often misunderstood. This panel can save many headaches and mistakes. These panels and boxes are interior grade NEMA enclosures.

Plant Support System: The Vine crop support is the backbone of the crop and must be capable of holding a lot of weight at least 70 lbs per bucket. CropKing provides for this support by supplying 1.66" diameter steel posts that are concreted into position, with galvanized cabling and all the necessary hardware.

Testing and Miscellaneous Equipment: We have put together a package that you will need to monitor your nutrient solutions and the environment in your greenhouse, as well as equipment for pollination and nutrient mixing pumps.

CO₂ Enrichment and Control System: The shorter daylight hours of winter limit plant growth. Another limiting factor is the reduced amount of CO₂ in the air. Plants have the ability to use more CO₂ during photosynthesis than may be found in the greenhouse atmosphere. More available CO₂ to use for photosynthesizing and growth, can mean faster and more prolific growing plants. This system monitors the available CO₂ in your greenhouse and adjusts it to your desired set point by the iGrow, which controls the CO₂ generator.



CropKing House in Pennsylvania

Shade Cloth: The most cost effective way of controlling greenhouse temperature during the hot, summer months is using shade cloth. It improves light diffusion, reflects summer heat, and keeps greenhouses cooler. It is manufactured from knitted polyethylene fabric that does not rot, mildew, or become brittle. We include the cabling and quick clips for easy installation. 40% white shade cloth is standard. (Different shade cloth densities are available depending on geographic location and local light levels). Aluminet is another great option for shading the greenhouse especially in very sunny climates

Growing Supplies: CropKing feels that it is beneficial to include the first year of growing supplies with your order. It saves on shipping costs, as it ships with the rest of your system at no extra charge. Your growing supplies include approximately 1 year of hydroponic fertilizer (designed specifically for your water), Rockwool starter cubes, hybrid seed for greenhouse production, perlite growing media, Bato bobbins, heat mats and trays, vine clips, truss hooks, a one year subscription for bumble bees, Mycostop, Greenshield disinfectant and insect sticky strips.

Note: Please check with local electric codes, some codes require the constructed panel to be UL listed. Our components are UL listed.

SYSTEM SIZES	WIDTH x LENGTH	PLANT SPACES
Freestanding Greenhouse	30 x 128	870
Single Bay Gutter Connect Greenhouse	22 x 128	720
2-Bay Gutter Connect Greenhouse	44 x 128	1,440
4-Bay Gutter Connect Greenhouse	88 x 128	2,880
6-Bay Gutter Connect Greenhouse	132 x 128	4,320
8-Bay Gutter Connect Greenhouse	176 x 128	5,760
16-Bay Gutter Connect Greenhouse	352 x 128	11,520

Customized Systems are available. Please call 330-302-4203 for more options.

BATO BUCKETS

The Bato Buckets are designed to be fed by an emitter and measure 12 inches long, by 10 inches wide, by 9 inches tall. Included with the bucket are two small siphon elbows, to be installed in the bottom of the bucket. These elbows are installed to keep a small reservoir of nutrient in the bottom of the bucket, about 2 inches in depth. This nutrient reservoir keeps the growing media from drying out and prevents water stress on the plant between irrigation cycles. The buckets are designed to rest on a 1 1/2 inch PVC drain line, so the drain water is suctioned from the lowest level and discharged into a central drain line. This method allows the reservoir to be constantly replenished and prevents accumulation of stale nutrient solution. bato buckets work well for heavy fruiting plants such as tomatoes, cucumbers, and peppers. Each bucket has a capacity of 2.9 gallons, it takes a half cubic foot of perlite to fill one bucket. *Call for special pricing on large orders.*

Bato Bucket with Two Elbows, Beige

Item BAT0001	1-50 \$6.25
Item BAT0001	51-250 \$5.75
Item BAT0001	251-607 \$4.95
Item BAT0001	608-4255 \$4.50
Item BAT0001	4256+ \$3.95



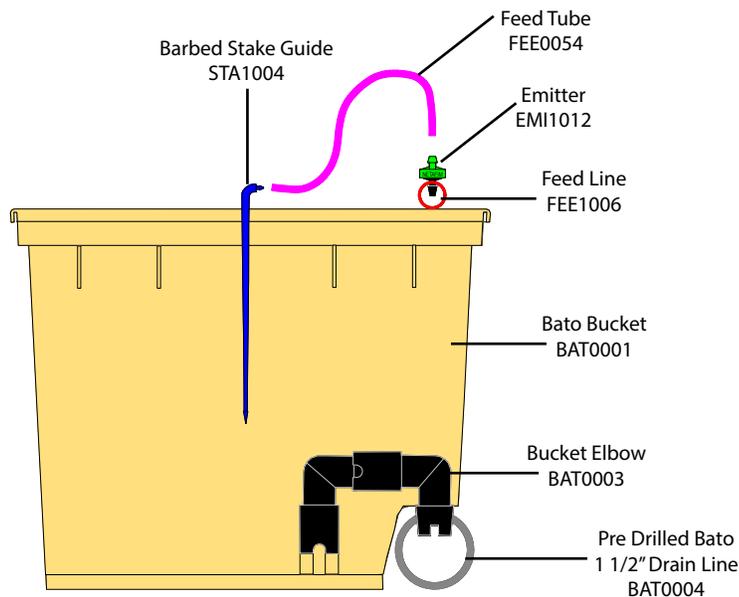
Bato Bucket Elbow, need two per bucket

Item BAT0003	2 elbows \$0.75
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Bato Bucket Cover Sets

Cover your bato bucket to prevent light and debris from entering. Help keep root zone temperatures optimal and keep algae growth out. Includes a set of 1.5 pound white, Styrofoam covers. 328 covers in a case, 164 complete sets of covers

Item BAT0005	1-199 \$0.45
Item BAT0005	200+ \$0.37



BUCKET ACCESSORIES

Perlite Horticulture Coarse Growing Media, 4 Cubic Foot - Fills 8 bato buckets

Item PER4000	1-32 \$11.60
Item PER4000	33-99 \$10.30
Item PER4000	100+ \$10.00

Barbed Stake Guide

Item STA1004	Each \$0.15
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Feed Tube 5/32 mm, per foot

Item FEE0054-E	Each \$0.20
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Feed Tube 5/32 mm 1000 foot roll

Item FEE0054	Each \$60.00
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Emitter Premium CNL 0.50 GPH

Item EMI1012	1-49 \$0.29
Item EMI1012	50+ \$0.27

Poly Pipe Feed Line 1/2 inch, black 500 ft. roll

Item FEE1500	Each \$45.00
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Poly Pipe Feed Line 1/2 inch, 250 ft. roll

Item FEE1525	Each \$27.95
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Poly Pipe Feed Line 1/2 inch, 100 foot roll

Item FEE1510	Each \$15.95
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Plant Support Cable 3/32 inch, per foot

Item CAB5001	Each \$0.25
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Plant Support Cable 3/32 inch, 500ft

Item CAB5002	Each \$78.00
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Plant Support Cable 3/32 inch, 1,000ft

Item CAB5003	Each \$135.20
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Cable Clamp 3/32 inch

Item CAB4000	Each \$0.50
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1 1/2" Drain Pipe Predrilled 7 hole with Belled End, 9-1/2 Foot Length on 16 inch centers

Item BAT0004	Each \$13.00
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Street Elbow 1-1/2 inch ABS PVC

Item PLSJJ4L-SP	Each \$2.90
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End Cap 1-1/2 inch ABS Anti-Vapor

Item PLSJA4S-S	Each \$2.96
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Slip Tee 1-1/2 inch ABS

Item PLSJJ4T-SSS	Each \$2.61
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BATO TRUSS HOOKS

Truss hooks are used to give support to the tomato cluster itself, keeping the truss stem from kinking and cutting off nutrient flow to the developing tomatoes. The J type truss hook has a small, "barbed" type of hook on one end that attaches to the vine twine. The other end has a small hook that goes onto the tomato truss.



3-1/2 inch Bato J-Type Truss Hook

Terra Cotta, Case of 6500

Item **TRU1300** Each \$84.00

3-1/2 inch Bato J-Type Truss Hook

Terra Cotta, Case of 13000

Item **TRU1300** Each \$151.75

3-1/2 inch Bato J-Type Truss Hook

Terra Cotta, Bag of 100

Item **TRU1302** Each \$5.00

4 1/2 inch Bato J-Type Truss Hook

Terra Cotta, Case of 8500

Item **TRU2000** Each \$88.74

PRE-TOM

PRE-TOM is a safe chemical solution which protects the pores of the skin against tomato leaf-green sap (chlorophyll). Apply just a few drops and rub onto hands and fingers prior to suckering, pruning, or harvesting. The green will be easier to wash off and will reduce drying of your hands.

Pre-Tom, 250 ml

Item **TOM1001** Each \$16.95

TWINE

Poly Twine, Roll of 1,050 Feet



Item **VIN4001** Each \$9.00

Blue Vine Twine, Roll of 10,000 Feet



Item **VIN4000** Each \$27.95

VINE CLIPS

Vine clips are used when growing tall plants, or vine crops, to clip the plant to a string or trellis support wire. They are primarily used by tomato, cucumber, and pepper growers, but are also used for roses and other tall plants. These are 7/8 inch with UV protection allowing for longer life.



7/8 inch Terra Cotta Econo Clip

23MM, Case of 11,000

Note: Clips designed for one time use.

Item **VIN8001** 1-9 \$64.00

Item **VIN8001** 10-19 \$61.00

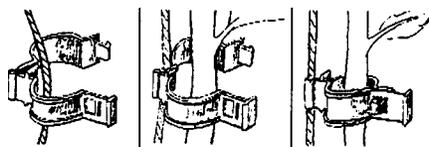
Item **VIN8001** 20+ \$57.25

23MM, Bag of 100

Item **VIN8003** \$5.00

1 inch Terra Cotta Mega Clip

25mm, Case of 9,000



Item **VIN8002** 1-9 \$79.00

Item **VIN8002** 10-19 \$70.00

Item **VIN8002** 20+ \$65.50

Growers are advised to use more clips early in the season. Generally, add one clip per week, which equals out to about a clip every 8-10 inches on the plant.

BATO BOBBINS

Designed to hang from the overhead crop support wire. There is a locking tab in the hood to help secure the bobbin on the wire and keep them from popping off. They come factory wound with 42 feet of white twine. Due to the UV stabilizers, Bato Bobbins can be rewound and reused for several years, but because they are priced so economically, and for sanitary purposes, it is best to replace them each crop. 800 bobbins per case.



Bato Bobbins with 42 foot Twine

Item **TOM1015** 1-799 \$0.50

Item **TOM1015** 800-3199 \$0.45

Item **TOM1015** 3200-12,799 \$0.40

Item **TOM1015** 12,800+ \$0.35

TAPENER

Max Tapener Machine, HTB-2



Item **TAP1000** Each \$74.95

Tape, HTB-2, Large Hole

Item **TAP1002** Each \$2.12

Tapener Blades, HTB-2, 3 Blades

Item **TAP1004** Each \$9.70

Tapener Staples, HTB-2, 4,800 Staples

Item **TAP1003** Each \$5.18

Be sure to use the tapener machine properly. If you are overusing the tapener, and not using enough vine clips to support the weight of the plant, the vine clip will pop open.

HOOK



Top Hook

For Cucumbers

Item **VIN8006** Each \$0.17

Great for cucumbers keeps the vine from pinching as it gets to the wire of the plant support.

IRRIGATION

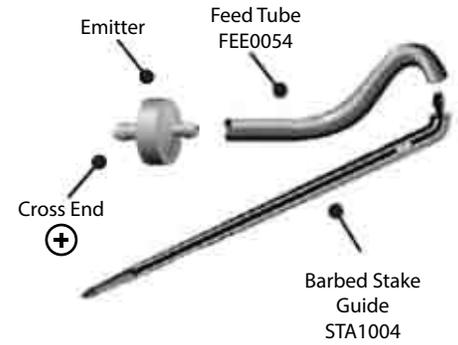
The Netafim Dripper Stake Assembly is ideal for soilless substrates and hydroponic applications because each rockwool cube receives an equal and precise amount of water nutrients.

Slow, Low-Flow Drippers

The slower and lower flow of Netafim drippers wet the soil media thoroughly without any run-off around the edges of the container. This allows longer runs on smaller polyethylene supply laterals maintaining excellent uniformity while holding down system costs. The PCNL dripper feature ensures that each plant receives the same amount of water at the same time. A built-in check valve assures that all the drippers will turn on - when the system is fully pressurized - and off at the same time.

Pressure Compensating Dripper

The WPCJ dripper is pressure compensating to provide a constant flow from 10 to 45 psi and has a built-in check valve to ensure instantaneous on-off at system shut-down. Drippers have a RED inlet for easy flow identification.



EMITTERS

Pressure Compensated:

0.50 GPH Item **EMI1002** 1-49, Each \$0.45



0.50 GPH Item **EMI1002** 50+, Each \$0.43

1.00 GPH Item **EMI1004** 1-49, Each \$0.45



1.00 GPH Item **EMI1004** 50+, Each \$0.43

2.00 GPH Item **EMI1000** 1-49, Each \$0.45



2.00 GPH Item **EMI1000** 50+, Each \$0.43

6.00 GPH Item **EMI1001** 1-49, Each \$0.60



6.00 GPH Item **EMI1001** 50+, Each \$0.57

Non-Pressure Compensated:

0.50 GPH Item **EMI1006** 1-49, Each \$0.42



0.50 GPH Item **EMI1006** 50+, Each \$0.40



1.00 GPH Item **EMI1007** 1-49, Each \$0.42

1.00 GPH Item **EMI1007** 50+, Each \$0.40

2.00 GPH Item **EMI1008** 1-49, Each \$0.42



2.00 GPH Item **EMI1008** 50+, Each \$0.40

Premium CNL Emitter:

0.50 GPH Item **EMI1012** 1-49, Each \$0.29



0.50 GPH Item **EMI1012** 50+, Each \$0.27

0.80 GPH Item **EMI1010** 1-49, Each \$0.59

0.80 GPH Item **EMI1010** 50+, Each \$0.56



Goof Plugs, Set of 10

Used to correct a mistake or fill a hole from a removed emitter.

Item **GOO1000** Each \$1.20



Barbed Stake Guide

Barbed Stake has a unique flow channel down the length of the stake directing the water into the container. It also has a pointed end for easy container insertion. 250 stakes in a bag.

Item **STA1004** Each \$0.15



Stabilizer Peg

Item **STA1000** Each \$0.14

POLY PUNCH

2 in 1 Punch and Cutter

Item **PUN7500** Each \$7.95

Punch N Cut



Item **PUN7000** Each \$18.95

Miracle Punch

Item **PUN5000** Each \$19.95

POLY PIPE FEED LINE

Black poly pipe made with a very high quality polyethylene material that is soft and pliable, and allows emitters to be installed. Designed to work with our Netafim emitters and feed tube.

Poly Pipe Feed Line 1/2 inch, 500 foot roll

Item **FEE1500** Each \$45.00

Poly Pipe Feed Line 1/2 inch, 250 foot roll

Item **FEE1525** Each \$27.95

Poly Pipe Feed Line 1/2 inch, 100 foot roll

Item **FEE1510** Each \$15.95

MPT by Barb 3/4 inch for 1/2 inch Poly Pipe

Item **FEE2001** Each \$0.98

Coupling Insert 1/2 inch

Item **FEE2003** Each \$0.42

Insert Tee 1/2 inch

Item **FEE2005** Each \$0.87

Insert Elbow 1/2 inch

Item **FEE2006** Each \$0.67

FEED TUBE

Super Flex UV White™ PE Tubing is made from the highest quality plastics with excellent UV resistance. The reflective white tubing is completely opaque to prevent algae growth. The tubing is not coated or layered white, it is solid white for long-term durability.

Feed Tube 5/3 mm (spaghetti tube), per foot

Item **FEE0054** Each \$ 0.10

Feed Tube 5/3 mm (spaghetti tube), 1000 foot roll

Item **FEE0054** Each \$60.00

Feed Tube, .160-.220 inch Black, per foot

Item **FEE1000** Each \$0.28

Feed Tube, .160-.220 inch Black, 1000 foot roll

Item **FEE1000** Each \$100.00

VALVES

Variflow Valve (Fits 5/3 tubing)

Item **EMI1015** Each \$ 0.50

Shut Off Valve (Greenback) for 1/2 inch Poly Pipe

Item **EMI1014** Each \$ 2.10

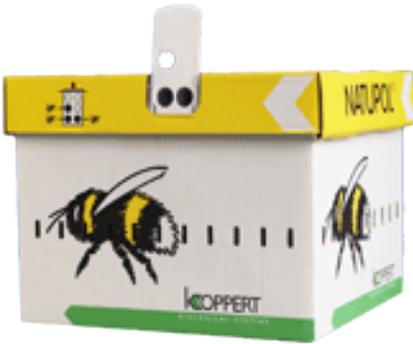
LINE END

This simple line end is used to clamp the end of our poly feed line. It can easily be removed to flush the line if desired.

16mm Line End

Item **FEE2002** Each \$0.21

USING BUMBLEBEES, THE NATURAL POLLINATORS



To obtain a good tomato harvest, it is necessary that the flowers of the crop are pollinated. In order to achieve fruit set, the pollen has to be released from the stamens and transferred to the female parts. Until recently, this was done using an electric or battery operated pollinator. This was a painstaking and delicate task requiring significant amount of labor.

In 1988 it was discovered that bumblebees could do this work much better and also more efficiently. Their sense of smell guides them to the flower when it is ready to be pollinated. The bumblebees accomplish this task seven days a week throughout the entire season. The bumblebee lives in colonies but acts more or less individually, unlike the honeybee. Bumblebees can also be used for pollination of a wide range of crops including tomatoes, peppers, blueberries, strawberries and other small fruits and orchard crops.

Bumblebees visit tomato flowers to gather pollen. Pollen is their protein source. The bumblebee only visits flowers when the pollen is mature and in a condition to be released. They do not work flowers that are immature or flowers that have pollen that is too wet and sticky due to high humidity. Bumblebees are generally not aggressive and if you leave them alone, they will leave you alone. When you are working with the plants, you do need to be aware that they are in the greenhouse, however. If you surprise one when you are clipping or suckering, both of you may jump. As long as you watch out for them and let them go about their business, there should be no problem. Each hive consists of 50 to 100 bumblebees. Because they are larger than honey bees, they can carry more pollen in one trip. They are also more efficient pollinators than honeybees. Because of the life cycle of the bumblebee and the mature nature of the social structure of the hive, the effectiveness of the hive for pollinating drops off after two to three months. Reinforcement hives or replacement hives need to be brought in once hive decline has been detected.

Bumblebees are sensitive to many insecticides and therefore they work quite well with greenhouses that employ the use of beneficial insects. The cost of using bumblebees for pollination is more than offset by the better job they do. Actually, the labor to manually pollinate probably costs more than the bumblebee hive. In addition to the labor savings, when using bumblebees growers report more complete pollination and fruit set, more uniform fruit, larger fruit, and better quality fruit. There are three sizes of hives currently available. Class "C" hives are for greenhouses up to 5,000 sq.ft., providing approximately 3 to 5 weeks of service. Growers with greenhouses from 5,000 to 15,000 sq.ft. should purchase a Class "B" hive and expect to get 6 to 8 weeks of service from it. Growers with 15,000 sq.ft. to half an acre of greenhouse should purchase a Class "A" hive and expect to get 12 to 16 weeks of service from it. **Hives must be ordered by Monday or Wednesday, 12:00 noon Eastern Time. They should arrive in the same week on Wednesday or Friday respectively.**

They should be ordered once flowers on the first cluster are opening on most of the plants in the greenhouse. Contact us for further information on how you can implement bumblebees in your greenhouse. UPS next day is required for shipping. Ask a sales associate for details.

BEEHIVE

- A Class Beehive**
Item **BEN3021** Each \$195.00
- B Class Beehive**
Item **BEN3022** Each \$135.00
- C Class Beehive**
Item **BEN3025** Each \$100.00

POLLEN

Order pollen with your first hive of the season. Pollen can be fed to the hive if there are not enough flowers to meet their pollen needs. This can occur if the hive is introduced before enough flowers are open. It can occur if your greenhouse does not have enough plants to support the hive. A 30 x 128 foot house is marginal. Pollen can be useful if you have a more vigorous hive in a marginal sized greenhouse. Store the pollen in the freezer.

- Pollen, 1 Pound**
Item **BEN3024** Each \$17.00

HELPFUL TIPS

When your bumblebees arrive...

...take them to the greenhouse and set them on a freestanding stand away from the fan end of the greenhouse. A shelf attached to the structure would provide undesirable vibration to the hive. After an hour or so, open the bee door by sliding the plastic slide to the open position. Leave the cardboard cover on the hive.

If ants are present, create an ant barrier so that the ants can't get to the hive. Ants will steal the artificial nectar if they have the opportunity.



PETAL TICKLER POLLINATOR

Series Ultima CL

- Lightweight
- Maneuverable
- Versatile
- Cordless
- A 4.8 Volt battery pack as the power source provides up to eight hours of run time before charging is required. Normal charge time is 1-1/2 to 2 hours.
- Variable speed control knob allows precise adjustment to optimize the pollination process.
- Rubber coated vibrating flex-rod provides protection to the flower stem.
- Switch: The standard switch in the Ultima CL has push-on, push-off action, which allows removal of thumb while in operation. A momentary action switch, which requires continuous activating pressure, is available as a special order.

The manufacturer offers a one year limited warranty against defective parts and workmanship.

- Petal Tickler Pollinator**
Item **POL1998** Each \$259.00



- Replacement battery for cordless pollinator
Pollinator Battery Pack 4.8V
Item **POL1996** Each \$51.80

CropKing NFT 4-6

Perfect introduction system to NFT, Great for educational purposes.

- (6) 4 foot channels with a total of 36 plant spaces
 - 55" x 55" x 31" LWH
 - Square Aluminum Support Table with adjustable legs for leveling
 - Completely closed system, including both spouted and smooth end caps to help avoid algae growth
 - Removable top caps for easy cleaning
 - Nutrient feed line plumbing and drain lines
 - Submersible Pump
 - Easy to assemble
- (Tank not Included; 25 gallon tank recommended)

Item **NFT0406** **\$375.00**



Order this System and Receive Free Shipping in Continental USA



4-6 Starter Kit includes: pH Control Kit, 2 Pounds Hydro-Gro Fertilizer, 200 1-inch Rockwool Cubes, Seed Tray and Hobby Hydroponics Book.

Item **NFT0406A** Each \$49.95

*Nutrient Reservoir is not included.
(20 gallon container with lid recommended)*

** Reservoir not included*

CropKing NFT 8-4



Overall Footprint:
8'8" x 42" x 56" LWH
*(Pictured with
Light Support Rack)*

- Square Aluminum Stand
- Feed and Drain Plumbing
- (4) 8 foot NFT Growing Channels with Removable Top Covers
- Channel End Caps
- Active Aqua Pump
- 25 Gallon Tank with Lid
- Adjustable feet for Leveling
- Assembly Instructions
- 48 plant positions

CropKing 8-4

Item **NFT0804** **\$695.00**

Light Support Rack (pictured above)

Item **NFT0804A** **\$114.95**

RECOMMENDED ACCESSORIES		
DESCRIPTION	ITEM #	PRICE
Rockwool AO 25/40 Pad	ROC1004	\$10.00
BlueLab Combo Meter	PHM3000	\$199.00
5 Pounds Leafy HydroGro	FER3020	\$19.00
5 Pounds Calcium Nitrate	FER3025	\$7.00
PH Control Kit	PHT4000	\$17.20
10/20 Seed Tray	TRA1101	\$1.40
<i>A Practical Guide to NFT by C.J. Molyneux</i>	BOO0027	\$49.75

CropKing NFT 8-25

The CropKing NFT 8-25 with 300 plant spaces is a great way to test your market for hydroponic lettuce or to supply a farm market with locally grown greens. The growing channels are constructed from UV stabilized, Food Grade plastic and have removable top covers for ease of cleaning. A cleaner system allows for healthier plants and higher yields.

CropKing eliminates the need for cutting and drilling by pre-punching the top covers.

Our channel comes with end caps to keep out light and prohibits algae growth. The design and height of the CropKing NFT channel works perfectly with a one inch rockwool cube, eliminating the need for filling net pots.

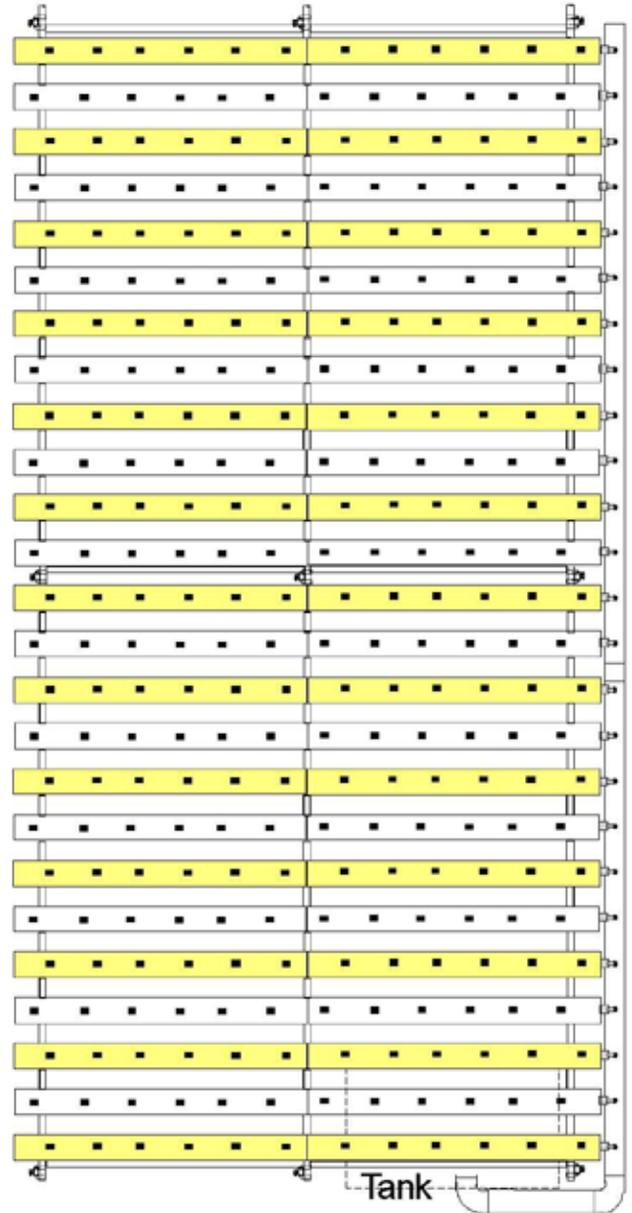
System measures 8.5 x 16.75 feet

System Includes

- (25)8 Foot Growing Channels with 300 plant spaces
- Galvanized Steel Support Table
- Nutrient Feed and Return Plumbing
- 1/8 HP Submersible, Continuous Duty Pump
- 100 Gallon Stock Tank
- Growing Instructions

CropKing NFT 8-25

Item NFT0825 \$1495.00



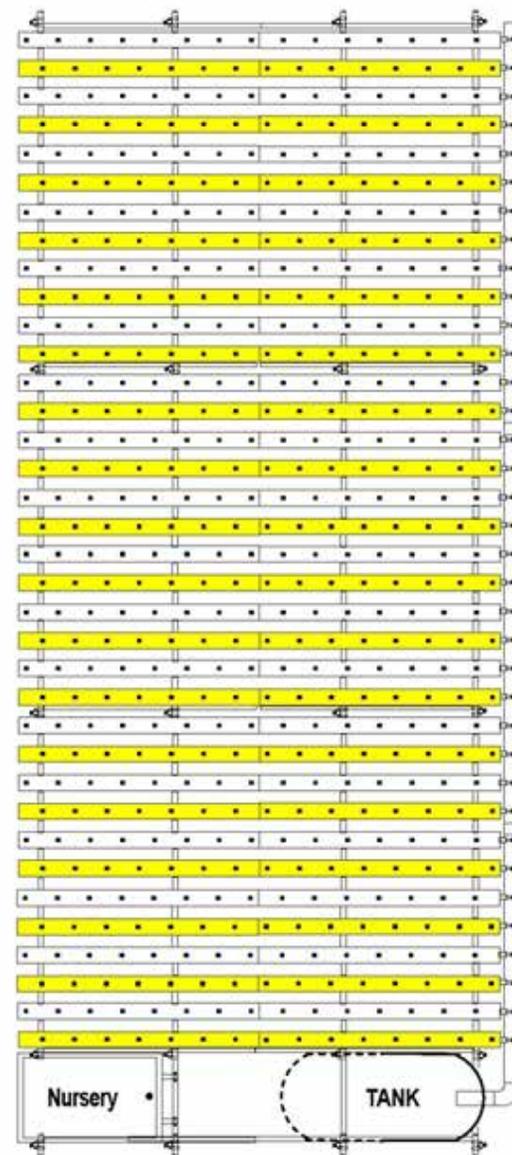
RECOMMENDED ACCESSORIES		
DESCRIPTION	ITEM #	PRICE
CropKing NFT Fertroller	FERT100	\$2795.00
25 Gallon Mixing Tank	TAN2001	\$100.50
50 Pounds Leafy HydroGro	FER1000	\$126.00
50 Pounds Calcium Nitrate	FER3014	\$29.95
(1) Case of Rockwool AO 25/40 Pad	ROC1004	\$178.80
10/20 Seed Tray without Holes	TRA1101	\$1.40
BlueLab Combo Meter	PHM3000	\$199.00
<i>A Practical Guide to NFT by C.J. Molyneux</i>	BOO0027	\$49.75

CropKing NFT 10-36

This hydroponic system is a great starter system for those interested in commercial hydroponic lettuce production. The NFT 10-36 is the perfect way to test your market for hydroponic lettuce. This system is completely enclosed to minimize algae growth with a removable top for easy cleaning. System measures 10-1/2 x 26-3/4 feet.

System Includes

- (36) 10 foot Growing Channels with 540 plant spaces
- Galvanized Steel Support Table
- Nutrient Feed and Return Plumbing
- (2) 1/8 HP Submersible Pump
- 100 Gallon Stock Tank
- 8 Tray Seedling Nursery
- Instructions



CropKing NFT 10-36

Item NFT1036 \$2495.00

CropKing NFT 10-36

with Fertroller and (3) 25 Gallon Stock Tanks

Item NFT1036A \$5495.00

RECOMMENDED ACCESSORIES

DESCRIPTION	ITEM #	PRICE
CropKing NFT Fertroller	FERT100	\$2795.00
25 Gallon Mixing Tank (for fertroller)	TAN2001	\$100.50
50 Pounds Leafy HydroGro	FER1500	\$126.00
50 Pounds Calcium Nitrate	FER3014	\$29.95
(1) Case of Rockwool AO 25/40 Pad	ROC1004	\$178.80
<i>A Practical Guide to NFT by C.J. Molyneux</i>	BOO0027	\$49.75

NUTRIENT FILM TECHNIQUE LETTUCE AND HERB PRODUCTION

CropKing's many years of research and growing experience have helped us to determine the best equipment and the best growing methods for different crops. When the goal is to produce high quality lettuce and herb crops, we recommend the NFT channel system. This growing system is an investment in the future of your business and every component is of the highest quality. The NFT re-circulating system efficiently reduces water usage. The channel is extruded, food grade PVC with removable top cap for ease of cleaning. Over the years we have made changes and improvements to our growing systems, but always giving careful consideration to which equipment will be the most efficient and economical. CropKing is genuinely concerned about our customer's "bottom line" because a profitable grower is our best advertisement!



Lettuce in CropKing NFT system in Maryland

Other features of our Commercial NFT System:

NFT Channels: Channels are Food Grade, sunlight resistant PVC Channels with removable top cover for easy cleaning. Each channel has two types of end caps: one solid cap, and one spouted cap with anti-drip drainage design. Planting holes in top caps are pre-punched square holes on 8" centers. CropKing NFT Channels are completely enclosed, eliminating light from reaching the nutrient solution which greatly reduces algae growth. Algae growth can plug lines and attract pests. The spouted end cap plugs directly into the drain line for easy removal during harvesting, cleaning and replanting.

Fertroller: The CropKing Fertroller is an automated nutrient controller providing continuous monitoring and control of the EC and pH levels of the nutrient solution tank. With continuous, automatic adjustment of the nutrient solution, growers can expect higher production and increased crop quality. Other features of the Fertroller include: an alarm to warn the grower if solution is outside the set parameters, safety preset lockouts prevent dosing in out of range situations, large digital displays of the actual values and desired values, easy pH calibration. The Fertroller Includes three concentrate tanks for Micro Nutrients, Macro Nutrients, and pH control, (All pre-assembled, mounted and tested)

Nutrient Delivery: Features a large underground nutrient solution reservoir. Underground reservoirs provide a stable nutrient solution temperature. Included in the package is an energy-saving nutrient pump along with a backup pump for crop security, In-line filtration with spare filter cartridges, large diameter PVC nutrient headers, zone valves and high flow emitter fitting to direct nutrient solution to each channel.

Seedling Nursery: Custom manufactured PVC seedling nurseries are located on one end of the growing system. The nursery is designed as a propagation area for enough new seedlings to populate the growing channels as they are harvested. The Nursery features automated irrigation for consistent growth and reduced labor.

NFT Channel Supports: Gatorshield galvanized steel frame for supporting the growing channels and connecting hardware are included.

CO₂ Enrichment and Control System: The shorter daylight hours of winter limit plant growth. Another limiting factor is the reduced amount of CO₂ in the air. Plants have the ability to use much more CO₂ during photosynthesis than is found in the normal atmosphere. More available CO₂ to use for photosynthesizing and growth, means faster and more prolific growing plants. This system monitors the available CO₂ in your greenhouse and adjusts it to your desired set point by the iGrow, which controls the CO₂ generator.

Computerized Environmental Controller: The iGrow 1400 Control System is the brain of the greenhouse. This dedicated unit controls all the environmental equipment in the greenhouse including fans, heaters, vent door, wet wall, lights and CO₂. Maintaining the proper plant environment in your greenhouse is critical to growing a profitable crop. This system measures both

temperature and humidity of the greenhouse and adjusts the equipment to maintain the correct set points. These precision controls allow you to improve crop quality, reduce equipment usage, and lower your energy costs. For added security, this system is capable of alarm auto-dialing to alert you if there is an issue in your greenhouse. The iGrow Control System has on-screen programming for easy tracking and adjustment of the environment. There are 12 outputs with LED status display indicators and manual over-ride switches. With the addition of "slave units" the iGrow system can be expanded.



Electrical Panel: To help make sure everything works properly, CropKing provides a pre-wired electrical panel that has been tailored to your greenhouse needs. The breaker panel is mounted on a white painted board, along with the relay box, and the iGrow controller(s). All of these come prewired together and terminal strips are provided to connect the greenhouse equipment. This pre-wired panel makes installation much easier, allowing you to just connect the panel to the incoming power source in your greenhouse. Wires will need to be run from your greenhouse equipment to the provided terminal strips on the panel. The wiring for this system can be complicated and often misunderstood by the local electrician. CropKing simplifies all this with their prewired electrical panel. Our panels and boxes are interior grade NEMA enclosures as we find this appropriate for a hydroponic greenhouse operation. The power requirements of a greenhouse depend on the size of the greenhouse and whether grow lights are being installed. Note: Please check with the local electric codes. While we use UL listed components in our electrical panels, some codes require the constructed panel be UL listed.

Testing and Miscellaneous Equipment: Bluelab Combo Meter, Sensaphone Model 1104, Sensaphone Remote Temperature Sensor, Nutrient Mixing Pump, Mini-Max Thermometer (2), pocket sling psychrometer, white ground cover for floor under the growing channel are all part of this package. A vacuum seeder is included with 2 Bays and larger to eliminate hand seeding.



Growing Supplies: CropKing feels that it is beneficial to include the first year of growing supplies with your order. It saves on shipping costs, as it ships with the rest of your system at no extra charge. Your growing supplies include approximately 1 year of hydroponic fertilizer (designed specifically for your water), and 1 inch Rockwool starter cubes and seeds for the first three crop rotations.

Shade Cloth: The most cost effective way of controlling greenhouse temperature during the hot, summer months is using shade cloth. It improves light diffusion, reflects summer heat, and keeps greenhouses cooler. It is manufactured from knitted polyethylene fabric that does not rot, mildew, or become brittle. We include the cabling and quick clips for easy installation. 40% white shade cloth is standard. (Different shade cloth densities are available depending on geographic location and local light levels).

SYSTEM SIZES	WIDTH x LENGTH	PLANT SPACES
Freestanding Greenhouse	30 x 128	6,192
Single Bay Gutter Connect Greenhouse	22 x 128	4,653
2-Bay Gutter Connect Greenhouse	44 x 128	9,306
4-Bay Gutter Connect Greenhouse	88 x 128	18,612
6-Bay Gutter Connect Greenhouse	132 x 128	27,918
8-Bay Gutter Connect Greenhouse	176 x 128	37,224
16-Bay Gutter Connect Greenhouse	352 x 128	74,448

CropKing can customize systems for your existing greenhouse

CROPKING FERTROLLER FOR NFT



CONTROLS pH & EC

The CropKing Fertroller enables the grower to automatically control the EC and pH of the nutrient solution in recirculating NFT type growing systems. With automatic EC and pH control the grower can expect higher production, better crop quality and more time for other greenhouse duties. CropKing Fertroller is more than just a controller. It is supplied completely assembled and mounted on a tubular steel stand and wired for 120 volt power. The unit includes a purpose-designed controller specifically for use with greenhouse hydroponic growing systems. The Fertroller includes a pre-mounted two head pump to deliver "A" & "B" nutrient concentrates. Recently improved with the addition of an adjustable pH pump.

The Fertroller will provide continuous control of EC and pH of the nutrient solution by adding nutrient and/or pH control solutions as needed. Easily adjustable set points and dosing cycles are displayed along with your desired targets on large (1/2") digital readouts. The Fertroller also has user adjustable alarm triggers to work with your alarm system. The Fertroller has a preset safety lockout feature to prevent dosing if EC, pH and/or solution flow is out of range. The EC control measurement range is 0.0 –

9.9 mS/cm with a control range of 0.2 – 9.8 mS/cm. Resolution is 0.1 EC with accuracy of ±3%. The EC probe has auto temperature compensation. The pH control measurement range is 4.0 – 7.2 pH with a control range of 5.0 – 7.2 pH. Resolution is 0.1 pH unit with accuracy of ±0.1 pH unit. The EC probe is factory calibrated with no adjustment needed. The pH probe is user calibrated. The controller and EC probe are warranted for 2 years and the pH probe warranty is 6 months. Other components carry the manufacturers warranty. **Nutrient Concentrate Tanks (3) must be purchased separately, see page 42.**

40" x 10" x 80" 100 lbs

NFT Fertroller Item **FERT100** Each \$2,795.00

REPLACEMENT PARTS FOR FERTROLLER

Single Head 1 inch Bellows Pump

Item **PUM6001** Each \$353.80

pH/ Automatic Temperature Control Probe for Dosetronic

Item **DOSETRONIC-ATC** Each \$140.00

EC Probe for Dosetronic

Item **DOSETRONIC-EC3** Each \$60.00

Temperature Sensor for Dosetronic

Item **DOSETRONIC-TEMP** Each \$65.00

Replacement Parts for Older Versions before 2010

EC Probe for Sample Board

Item **DOSETRONIC-EC2** Each \$75.00



HAVE QUESTIONS?

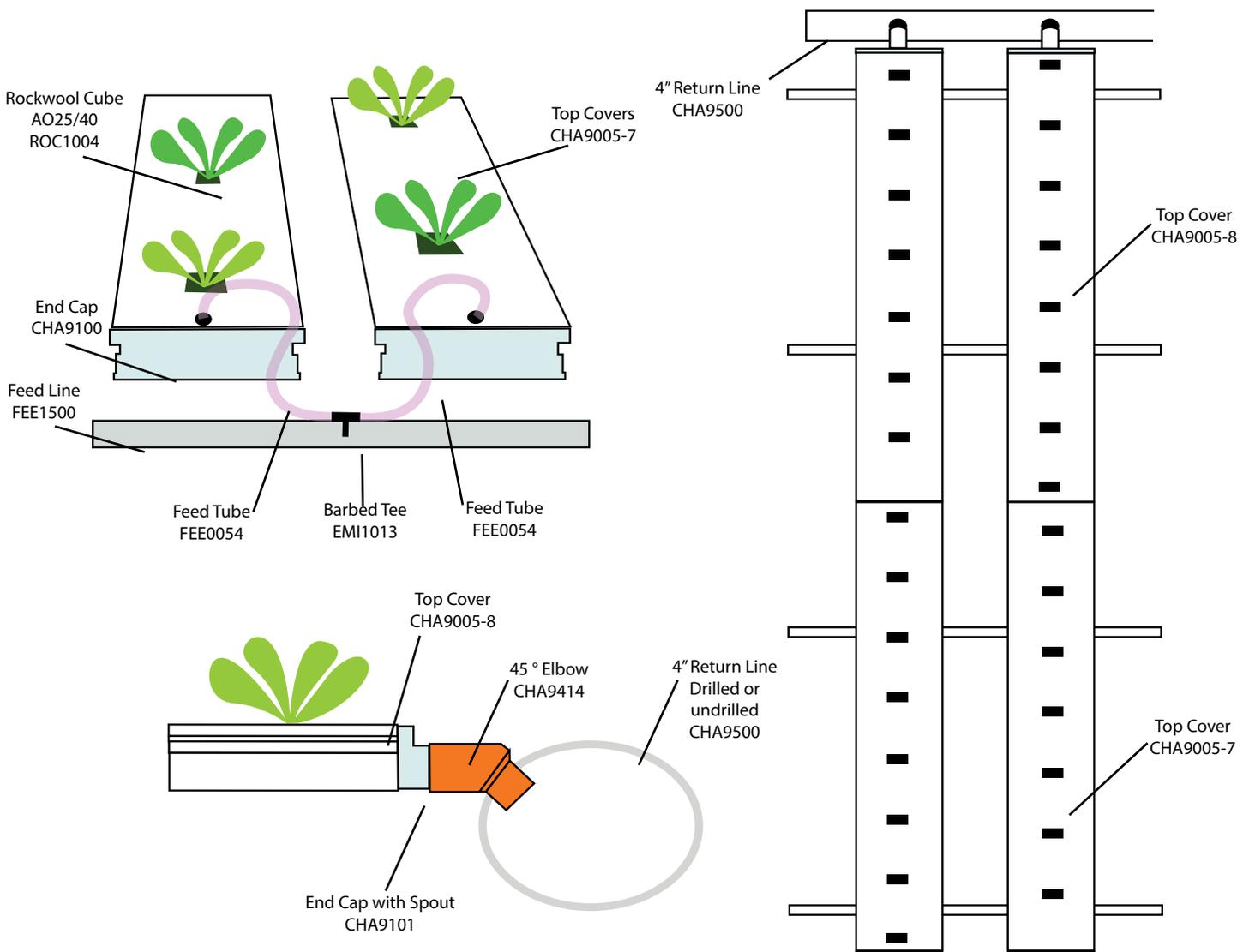
Talk to one of our experienced sales and technical specialists about what products best fit your needs!

330-302-4203

NFT CHANNEL

CropKing's NFT channels are easy to use and easy to clean. One unique feature of our NFT channel is the removable lid or top cap for ease of cleaning and harvesting. There are end caps that cover both ends of the channel keeping out the light and thus preventing algae growth in the channel. It is constructed from food grade, UV stabilized plastic for safety and long life. Lids snap on and remain secure until they need to be removed for harvesting and cleaning. No need to spend hours punching or drilling holes in the lids because they come pre-punched with a 1" square hole on 8" centers. These holes as well as the depth of the channel are the perfect size to accept a 1" square cube of either Rockwool or Oasis. A slight "v" in the bottom of the channel directs the nutrient down the center of the channel to insure all plants receive the necessary nutrients. **See page 22 for pricing and sizes.**

- Manufactured using non-toxic food grade plastics
- Lids remain secure, yet are easily removed for cleaning
- The tops are pre-punched to save you hours of drilling
- Standard holes in the top caps are square to accept a 1" seedling cube—no need to use net pots.
- Ask your salesperson about the availability of custom channels and covers
- Channel is available in standard lengths of 4', 8', 10' and 12' with top cap available in 4' and 5' lengths



NFT ACCESSORIES

- Poly Pipe Feed Line 1/2 inch, 500 foot roll**
Item **FEE1500** Each \$45.00
- Barbed Tee Emitter 5/3**
Item **EMI1013** Each \$0.19
- Emitter Nipple 5mm**
Item **EMI1005** 1-49, Each \$0.15
- Feed Tube 5/3 mm, per foot**
Item **FEE0054** Each \$0.20
- Variflow Valve**
Item **EMI1015** Each \$0.50
- Shut Off Valve "Greenback"**
for 1/2 inch Poly Pipe
Item **EMI1014** Each \$2.10
- Threaded Shut Off Valve for 1/2 inch Poly Pipe**
Item **EMI1016** Each \$2.40

NFT GROWING CHANNEL EXTRUDED FOOD-GRADE PVC

Call for special pricing on large orders.

4-5/8" WIDE x 1-1/4" DEEP CHANNEL		TOP COVERS		END CAP	
4 Foot Length		5 Foot Length, 7 Square holes		5 Foot Length, 7 Square holes	
Item CHA9400	Each \$5.20	Item CHA9005-7	1-399 \$5.23	Item CHA9005-7	1-399 \$5.23
8 Foot Length		Item CHA9005-7	400-999 \$4.70	Item CHA9005-7	400-999 \$4.70
Item CHA9008	1-249 \$8.53	Item CHA9005-7	1000-1999 \$4.24	Item CHA9005-7	1000-1999 \$4.24
Item CHA9008	250-624 \$7.68	Item CHA9005-7	2000+ \$3.81	Item CHA9005-7	2000+ \$3.81
Item CHA9008	625-1249 \$6.91	5 Foot Length, 8 Square Holes		5 Foot Length, 8 Square Holes	
Item CHA9008	1250+ \$6.21	Item CHA9005-8	1-399 \$5.23	Item CHA9005-8	1-399 \$5.23
10 Foot Length		Item CHA9005-8	400-999 \$4.70	Item CHA9005-8	400-999 \$4.70
Item CHA9010	1-199 \$10.65	Item CHA9005-8	1000-1999 \$4.24	Item CHA9005-8	1000-1999 \$4.24
Item CHA9010	200-499 \$9.59	Item CHA9005-8	2000+ \$3.81	Item CHA9005-8	2000+ \$3.81
Item CHA9010	500-999 \$8.53	4 Foot Length, 6 Square Holes		4 Foot Length, 6 Square Holes	
Item CHA9010	1000+ \$7.78	Item CHA9004	1-499 \$4.30	Item CHA9004	1-499 \$4.30
12 Foot Length		Item CHA9004	500-1249 \$3.87	Item CHA9004	500-1249 \$3.87
Item CHA9012	1-166 \$11.73	Item CHA9004	1250-2499 \$3.48	Item CHA9004	1250-2499 \$3.48
Item CHA9012	167-416 \$10.56	Item CHA9004	2500+ \$3.13	Item CHA9004	2500+ \$3.13
Item CHA9012	417-833 \$9.50				
Splice					
Item CHA9102	\$1.36				



The top cover has 1 inch square holes punched on 8 inch centers. For a 10 foot channel you will need one 5 foot top cover with 7 holes and one 5 foot top cover with 8 holes.

Each channel needs one end cap, one spouted end cap and an elbow. The one on the drain end has a spout built in designed to connect to standard pvc pipe with the elbow.

3-3/4" WIDE x 1-1/4" DEEP CHANNEL		TOP COVERS	
Per Foot		Top Cover, Per Foot	
Item CHA4000	\$1.30	Item CHA4001	\$1.07
8 Foot Length		5 Foot Top Cover, 7 Square Holes	
Item CHA4008	\$10.30	Item CHA4005-7	\$5.35
10 Foot Length		5 Foot Top Cover, 8 Square Holes	
Item CHA4010	\$13.00	Item CHA4005-8	\$5.35
* Cut fee is added when shipping UPS		4 Foot Top Cover, 6 Square Holes	
12 Foot Length		Item CHA4004	\$4.28
Item CHA4012	\$15.50		
* Cut fee is added when shipping UPS		END CAP	
		End Cap	
		Item CHA4002	\$1.70
		End Cap with Spout	
		Item CHA4003	\$1.70

45° Elbow	
Item CHA9414	1-249 \$1.80
Item CHA9414	250-624 \$1.40
Item CHA9414	625-1249 \$1.25
Item CHA9414	1250+ \$1.05

9-1/2" WIDE x 2" DEEP CHANNEL	
*Item not stocked call for pricing	
PVC Cement, 4oz	
Item PLMPVCCE-4OZ	\$4.38
PVC Cement, Pint	
Item PLMPVCCE-PT	\$10.34
PVC Cement, Quart	
Item PLMPVCCE-QRT	\$15.17

Wide Channels Used for CropKing Microgreen/Forage Crop/Nursery		End Cap	
10" WIDE X 1-1/4" DEEP		Item CHA3001	1-74 \$ 5.75
12 Foot Channel		Item CHA3001	75-199 \$ 4.90
Item CHA3000	1-199 \$55.00	Item CHA3001	200 + \$ 4.05
Item CHA3000	200-499 \$51.15	End Cap with Spout	
Item CHA3000	500-999 \$47.45	Item CHA3002	1-74 \$ 6.00
Item CHA3000	1,000 + \$43.05	Item CHA3002	75-199 \$ 5.10
* Cut fee is added when shipping UPS		Item CHA3002	200 + \$ 4.20
		12 Foot Top Cover	
		Item CHA3003	\$52.00

PVC Cleaner, 4oz	
Item PLMPVCCL-4OZ	\$3.57
PVC Cleaner, Pint	
Item PLMPVCCL-PT	\$6.85
PVC Cleaner, Quart	
Item PLMPVCCL-QRT	\$8.75
PVC Primer, 4oz	
Item PLMPVCPR-4OZ	\$4.55
PVC Primer, Pint	
Item PLMPVCPR-PT	\$11.25
PVC Primer, Quart	
Item PLMPVCPR-QRT	\$14.70

THE AQUACULTURE SYSTEM

The Aquaculture System is a great introduction to fish farming. Simple to set up and maintain, it incorporates all of the aspects of aquaculture on a smaller scale. Use it to produce clean, wholesome fish for you and your family year-round, or as an outstanding teaching tool for the classroom.



System shown with optional window

The System is suitable for many species such as, tilapia, catfish and ornamentals.

Daily maintenance consists of feeding the fish and the simple act of opening a valve to flush the solids from the collection chamber. It is economical to operate. CropKing Aquaculture System uses less than 10 gallons of water a day and less electricity than a 60 watt light bulb.

CropKing Aquaculture System is made with durable, professional quality materials that are fully warranted. It comes complete and ready to set up with a 300 gallon fish tank, filtration unit, UL-listed air pump and all the plumbing you'll need to make it work right out of the package. The tanks will fit right through a standard doorway and the easy to follow instruction book guides you through the simple steps for set up.

Item AQUHS300 Each \$3,345.00

THE AQUAPONIC SYSTEM

The Aquaponic System combines fish culture and true hydroponic plant production into one integrated ecosystem. Easy to set up and maintain, the Aquaponic System can provide you with fresh fish and vegetables from a clean and healthy environment year-round. The fish waste provides the nutrients for the plants, and the plants clean up the water to make it a better place for the fish to live in. This mutually beneficial arrangement is the same as what goes on in nature, but this one is completely within your control.



System shown with optional window and stand

The 4 x 8 foot hydroponic growing bed is terrific for a kitchen herb cutting garden, dozens of heads of lettuce or other salad greens. In the classroom, there is ample space for individual student projects that simply makes learning fun and exciting.

The Aquaponic System is made with durable, professional quality

materials. It comes complete and ready to set up with a 200 gallon fish tank, 4 x 8 foot hydroponic growing bed, an energy efficient, UL-listed air pump and hydroponic media. The Aquaponic System package can fit through a standard doorway.

Item AQUHILM01 Each \$3,395.00

ACCESSORIES

Tank Heater, 1000 watt Submersible with Digital Controller- Industrial Quality
Item AQUHEAT01 Each \$415.00

Viewing Window, 1 x 2 foot
Item AQUHWIN01 Each \$99.95

Tap Water Conditioner, 1 Gallon
Item TAPWA01 Each \$42.70

Float Valve for Automatic Filling
Item FLOV001 Each \$43.00

Beneficial Bacteria, Dry, 0.8 Ounces
Item AQUHBENBACPDR-1 Each \$26.40

Dip Net, 5 Foot
Item AQUNET01 Each \$36.45

Seed Starter Kit includes 10-20 Tray, 1 Pad of 1-1/2 inch Rockwool and 2 inch Dome
Item SEEDSTRO1 Each \$24.95

Stand for Aquaponics growing bed
Item AQUHSTAND Each \$449.95

Digital Thermometer
Item AQUHTHER Each \$44.15

Air Pump for AQUHS300, 100 inch max depth, 92 running watts, 115V/60 Hz
Item AQUA0014 Each \$431.80

Air Pump for AQUHILM01, Outdoor, 81 inch max depth, 48 running watts
Item AQUA0013 Each \$349.70

FUNDAMENTALS OF AQUACULTURE

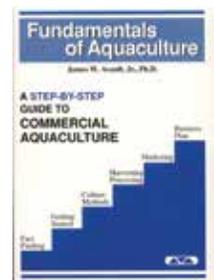
-By James Avault, Jr.

A very easy to follow text of practical aquaculture covered from A to Z.

Everyday problems worked on pond construction, feeding, disease control and more. Also included is a comprehensive guide for the beginning fish farmer or aquaculturist, and a reference for someone established in aquaculture.

There are study questions and an extensive reference section at the end of each chapter. This step by step guide to commercial aquaculture contains over 280 photos, and more than 50 illustrations.

Item BOO0075 Each \$99.95



CropKing Vertical Racks



CropKing FodderKing 4-8

The FodderKing 4-8 is our smallest system, perfect for those only needing a small amount of hydroponic fodder sprouts each day. Whether your feeding twenty chickens or one cow, the daily production of your own nutritious fodder is economically beneficial and lots of fun! Larger space between shelves allows room to mount supplemental lighting.

- Eight (8) 10 inch W x 4 foot L UV stabilized, food grade PVC growing channels
- 2 channels per level/ 4 levels high
- 400 GPH submersible pump
- Overall footprint of assembled system is 2'2" wide x 4'6" Long x 5'6" Tall
- 1 Soaking bucket with 2 mesh liners
- 27 Square feet of growing area
- Capable of producing 23 pounds a day!
- Perfect for the hobby farmer!

Item FK48 \$850.00



CropKing FodderKing 6-24

The FodderKing 6-24 is identical to our large model in every way except for length. It is perfect for entry level growers or someone experimenting with the addition of fodder to their feeding regime. At an extremely competitive price this unit is a great way to “get your feed wet” growing hydroponic fodder sprouts.

- (24) 10 inch W x 6 foot L UV stabilized, food grade PVC growing channels
- 4 channels per level 6 levels high
- Pump, 1/8 HP pond
- Overall footprint of assembled system is 7' Long x 4' 2" Wide x 6'10" Tall
- 3 Soaking buckets with 6 mesh liners
- 120 Square feet of growing area
- Capable of producing 105 pounds of fodder daily!
- Tank not included

Item FK624 \$1,950.00



CropKing FodderKing 12-24

With only 20 minutes of labor a day, you can produce up to 210 pounds of hydroponic fodder sprouts a day. Each galvanized steel-supported system also includes all necessary plumbing, a submersible pump, timer and detailed operational instructions. All of these systems are recirculating and drain-to-waste compatible, making growing your own fodder a breeze!

- (24) 10 inch W x 12 foot L UV stabilized, food grade PVC growing channels
- 4 channels per level by 6 levels high
- Pump, 1/8 HP pond
- Overall footprint of assembled system is 13' Long x 4' 2" Wide x 6' 10" Tall
- 3 Soaking buckets with 6 mesh liner
- 240 Square feet of growing area
- Tank not included

Item FK1224 \$2,950.00



CropKing MicroGreen Rack

A MicroGreen is the shoot of a vegetable plant that is picked just after the first few true leaves have developed. MicroGreens are often used as a garnish and are tender, delicate and full of flavor! They are ready for harvest, on average, about two weeks after seeding.

Our unique hydroponic MicroGreen growing racks are designed to allow for more sunshine to reach between the levels. There is even enough space to add artificial lighting above each level. With 4 levels per rack and 4 channels per level, the 16 channels will allow you to harvest a full channel 3-4 times per week. Local Chefs get excited by the prospect of having fresh, beautiful, MicroGreens available all year around.

SINGLE RACK MICROGREEN GROWING SYSTEM

- Single rack with nutrient feed and drain plumbing.
- (16) 10 inch W x 12 foot L PVC growing channels
- 4 channels per level by 4 levels high
- Measurement of complete rack is 13' x 4'2" x 6' 4" LWH
- Support rack is made of square galvanized steel
- Pump, 1/8 HP 1900GPH
- 2 - 10" rolls of burlap
- Digital Timer
- Instruction Manual

Item **MGSINGLERACK** **\$2,350.00**



Shown with optional lights and reservoir*

Tank not included

CropKing Greenhouses

GUTTER CONNECT GREENHOUSE



A gutter connect greenhouse is a series of arches(bays) connected together at the gutter level. Each bay is 22' wide. Additional bays can be added for expansion.

HOOP HOUSE



CropKing's freestanding greenhouse is a hoop or arch design.

HIGH TUNNEL



CropKings High Tunnel is a gothic style arch with high side walls.

HYDROSHED



Hydroshed is a turnkey, ready-to-install hydroponic greenhouse, complete with all required systems, technology, materials and instructions necessary to begin growing immediately.

22 FOOT WIDE GUTTER CONNECT GREENHOUSE

Featuring:

- Expandable structure
- More growing space
- Stuctural aluminum gutters
- Tensile strength of 50,000- 55,000 PSI
- Gutter has base extruded into the aluminum gutter
- Tubing is Allied Gatorshield Steel

LENGTH		48'	72'	96'	128'
Frame with 8 foot high gutters	1 Bay	\$4,398	\$6,269	\$7,785	\$9,930
	Additional Bay	\$3,143	\$4,407	\$5,492	\$7,010
Cover with 8 foot high gutters	1 Bay	\$1,465	\$1,967	\$2,036	\$2,491
	Additional Bay	\$490	\$613	\$774	\$933

LENGTH		48'	72'	96'	128'
Frame with 10 foot high gutters	1 Bay	\$5,377	\$7,571	\$9,417	\$11,993
	Additional Bay	\$3,798	\$5,243	\$6,513	\$8,279
Cover with 10 foot high gutters	1 Bay	\$1,757	\$2,364	\$2,455	\$3,030
	Additional Bay	\$490	\$613	\$774	\$933

Specifications:

Engineered for 20 pound roof load, 90 MPH wind load

- Column Post Spacing..... 8 Foot
- Height to Gutter..... 8 or 10 Foot
- Arch Spacing 4 Foot
- Purlins.....3, 1-3/8" OD / 16 Gauge
- Wind Braces4, 1-3/8" OD / 16 Gauge
- Column Post, 8 Foot Gutter: 2" round OD / 13 Gauge
- Column Post, 10 Foot Gutter...2-1/2" square OD / 12 Gauge
- Arch 1-5/8" OD / 14 Gauge
- End Wall Posts..... 1-5/8" OD / 14 Gauge
- End Wall Bracing 1-5/8" OD / 14 Gauge
- Gutter..... 10" Aluminum Extruded
- Cross Tie 1-3/8" OD / 16 Gauge



HOOP HOUSE STRUCTURE

Featuring:

- Arches on 4' centers -for added strength and snow load
- Heavy duty ground stakes
- Gatorshield™ galvanized steel
- Steel made in the USA
- Heating and cooling options are available.
Ask your salesperson.



12' Wide Greenhouse with 3 purlins Center height is 7'7"			
Length	Frame	Double Layer Cover	SingleLayer Cover
24	\$712	\$590	\$352
36	\$939	\$640	\$401
48	\$1202	\$680	\$450
72	\$1621	\$898	\$542
96	\$2043	\$1149	\$639

15' Wide Greenhouse with 1 purlin Center height is 7'			
Length	Frame	Double Layer Cover	SingleLayer Cover
24	\$633	\$590	\$352
36	\$833	\$641	\$401
48	\$1053	\$680	\$450
72	\$1407	\$898	\$542
96	\$1753	\$1149	\$639

18' Wide Greenhouse with 3 purlins Center height is 9'6"			
Length	Frame	Double Layer Cover	SingleLayer Cover
24	\$804	\$726	\$456
36	\$1070	\$783	\$495
48	\$1372	\$822	\$544
72	\$1878	\$1082	\$636
96	\$2378	\$1386	\$734

24' Wide Greenhouse with 3 purlins Center height is 12'5"			
Length	Frame	Double Layer Cover	SingleLayer Cover
24	\$1078	\$866	\$538
36	\$1466	\$923	\$587
48	\$1890	\$962	\$635
72	\$2639	\$1263	\$728
96	\$3382	\$1620	\$825

30' Wide Greenhouse with 5 purlins and cross brace Center height is 12'			
Length	Frame	Double Layer Cover	SingleLayer Cover
24	\$1296	\$960	\$583
36	\$1797	\$1016	\$632
48	\$2321	\$1055	\$680
72	\$3270	\$1397	\$773
96	\$4211	\$1808	\$870

***Double Cover Clear 6 mil UV Film includes inflation fan and quick lock to fasten covers**

***Single Layer Cover White 4 mil Film**

***Roll up sides page 45**

HIGH TUNNEL

This greenhouse is perfect to extend the growing season, or to grow all year long with optional heating and cooling packages. Start your seeds, grow in the dirt, or add one of CropKing’s hydroponic dutch bucket or NFT growing systems.

The gothic style arches and high side walls create a very workable greenhouse with no wasted space. Add a lot of production to your produce business with very little cost. Other add ons to this greenhouse include roll up, or down side walls, metal end walls, and roll up or sliding end wall doors.

Pricing

SIZE	STRUCTURE WITH DOOR	DOUBLE COVER/ INFLATION FAN/ ALUMINUM COVER LOCK
24' x 48'	\$3,485	\$1,280
24' x 96'	\$6,105	\$1,655
30' x 48'	\$3,790	\$1,885
30' x 96'	\$6,679	\$1,989

Structure

- High strength GatorShield galvanized steel
- 4' arch spacing with bottom cord and "V" bracing every 8' for a very heavy duty structure
- 42" standard ground stakes
- Wind bracing in all four corners
- 6 purlin per structure for additional strength
- Aluminum clad, pre-hung steel door with window and lockset



Cover

- One IR cover and one UVA-6mil, 4 UV greenhouse covers
- CropKing extruded aluminum polylock system to fasten covers to structure
- High quality air inflation fan
- Includes double wall poly covers for end wall covering

CropKing is an NRCS approved vendor

Call a sales representative today for your custom quote!



Hydroshed

Professional-grade hydroponic technology designed for homeowners, restaurants and schools.

Hydroshed is a turnkey, ready-to-install hydroponic greenhouse, complete with all required systems, technology, materials and instructions necessary to begin growing immediately.

Hydroshed is perfect for vining vegetables (tomatoes, cucumbers, peppers), leafy vegetables (lettuce, basil, greens) and a large variety of fruits. And it provides the ideal environment for year-round growth, regardless of your climate.

Hydroshed details:

- 10 x 16' footprint
- American-made, high-grade structural steel frame
- Commercial grade 6 mil polyethylene covering
- Locking steel door
- Wet wall with motorized shutters
- Exhaust fan and vents
- 8-bucket hydroponic growing system (up to 16 plants)
- 3 tray NFT growing system (36 plants)

Each \$8,995



Visit hydroshed.com for more information

ROCKWOOL

- Proven to be as one of the best and most reliable growing medium available.
- Completely sterile rockwool provides an optimum air/water ratio for the roots, insuring an abundant supply of oxygen to the roots.
- Used among commercial vegetable and floral producers throughout the world.
- Available in propagation cubes, propagation blocks, mini-blocks, and growing slabs.

The AO25/40, AX25/40, and AO36/40 rockwool cubes are designed for seed and cutting propagation. The individually shaped individual “cells” within the pad allow for effective air pruning which encourages rooting within, rather than between individual blocks. Each of these cubes comes in a 10 x 19.5 inch sheet or “pad” and fits into a standard 10 x 20 inch flat.

Rockwool Cubes

The AO 25/40 rockwool cube is slightly under 1 inch square at the top, and is slightly over 1-1/2 inch in depth. The hole is on the wide end of the cube. It is commonly used for starting lettuce and some herbs, Designed to fit into the square holes in our NFT channel top covers. Each “pad” contains 200 cubes.

1 inch AO25/40 Cube, Pad of 200 Cubes

Item **ROC1004** Each \$10.00

1 inch AO25/40 Cube, Case of 30 Pads

Item **ROC1004** 1-11 \$178.00

Item **ROC1004** 12-29 \$168.90

Item **ROC1004** 30+ \$162.60

The AX25/40 has the hole on the **narrow end** of the cube, and is used for the same purposes as the AO25/40. Some growers prefer it because its base is wider and does not tip over as easily.

1 inch AX25/40 Cube, Pad of 200 Cubes

Item **ROC1006** Each \$10.00

1 inch AX25/40 Cube, Case of 30 Pads

Item **ROC1006** 1-11 \$178.00

Item **ROC1006** 12-29 \$168.90

Item **ROC1006** 30+ \$162.90

The AO36/40 rockwool cube is slightly under 1-1/2 inch square at the top, and is slightly over 1-1/2 inch in depth. The hole on the AO36/40 is on the wide end of the cube. It is commonly used for starting tomato and cucumber seedlings. It is designed to be used with the propagation blocks which have a hole to accept the AO36/40.

1-1/2 inch AO36/40 Cube, Pad of 98 Cubes

Item **ROC1008** Each \$10.00

1-1/2 inch AO36/40 Cube, Case of 30 Pads

Item **ROC1008** 1-11 \$178.10

Item **ROC1008** 12-29 \$168.90

Item **ROC1008** 30+ \$162.60

2 inch AO 50/40 Cube, Pad of 50 Cubes

Item **ROC5000** Each \$11.09

2 inch AO 50/40 Cube, Case of 30 Pads

Item **ROC5000** Case \$168.00



Rockwool Blocks

Propagation or growing blocks, are used for holding the seedling transplants longer prior to putting them out onto the Bato bucket or rockwool slabs. Some of the blocks have “planting” holes already in them to accept the AO36/40 propagation cubes. The blocks are individually wrapped in UV resistant plastic on all four sides. The base of the propagation blocks is grooved to promote drainage.



The MM40/40 block is slightly over 1-1/2 inch square and comes in strips of 15 blocks, 150 strips per case. MM50/40 block measure slightly under 2 inches square and comes in strips of 12 blocks, 150 strips per case. Each block is wrapped on the four sides and has a hole punched in one end. This block is not tapered like the AO25/40 or AO36/40. The MM40/40 is used primarily for propagating cuttings. The MM40/40 has a 6/15 hole for seeds or cuttings.

MM40/40 Cube, Strips of 15

Item **ROC4041** Each \$3.14

MM40/40 Cube, Case of 150 Strips

Item **ROC4041** 1-11 \$282.00

Item **ROC4041** 12+ \$235.50

MM50/40 Cube, Strips of 12

Item **ROC1011** Each \$4.91

MM50/40 Cube, Case of 120 Strips

Item **ROC1011** 1-11 \$237.20

Item **ROC1011** 12+ \$220.80

The DM4-G propagation block is 3 inch square by 2-1/2 inch deep. It has a hole to accept the AO36/40 cube. It is commonly used for tomatoes, cucumbers, and peppers.

3 inch DM4-G 42x40 Block with 1-1/2 inch Holes

Item **ROC1002** Each \$0.55

3 inch DM4-G 42x40 Block with 1-1/2 inch Holes, Case of 384

Item **ROC1002** 1-14 \$96.00

Item **ROC1002** 15+ \$88.32

The DM6-G propagation block is 4 inch square by 2-1/2 inch deep. It has a hole to accept the AO36/40 cube. It is also used for tomatoes, cucumbers, and peppers Some growers prefer the large block which gives them the capability of holding the seedling longer before transplanting into the greenhouse.

4 inch DM6-G 42x40 Block with 1-1/2 inch Holes

Item **ROC1019** 1-14 \$0.68

Item **ROC1019** 15+ \$0.60

4 inch DM6-G 42x40 Block with 1-1/2 inch Holes, Case of 216

Item **ROC1019** 1-24 \$73.44

Item **ROC1019** 25-99 \$66.96



Vital Slabs

5.9 x 3 x 35.4 inch Slab

Item **ROC0998** Each \$5.81

5.9 x 3 x 35.4 inch Slab, Case of 12 Slabs

Item **ROC0998** 1-11 \$34.92

Item **ROC0998** 12+ \$32.64

5.9 x 3 x 39.4 inch Slab

Item **ROC0999** Each \$6.45

5.9 x 3 x 39.4 inch Slab, Case of 12 Slabs

Item **ROC0999** 1-11 \$38.76

Item **ROC0999** 12+ \$36.24

7.9 x 3 x 35.4 inch Slab

Item **ROC0996** Each \$7.75

7.9 x 3 x 35.4 inch Slab, Case of 12 Slabs

Item **ROC0996** 1-11 \$46.44

Item **ROC0996** 12+ \$43.44

7.9 x 3 x 39.4 inch Slab

Item **ROC0997** Each \$8.61

7.9 x 3 x 39.4 inch Slab, Case of 12 Slabs

Item **ROC0997** 1-11 \$51.60

Item **ROC0997** 12+ \$48.48



Call for special pricing on large orders.

Shipping costs vary on all growing medium.
Call CropKing at 330-302-4203

LECA STONE



Hydro Rokz

maintains perfect air-to-water ratio promoting vigorous root development so plant roots stay healthy and oxygen rich. Rokz unique shape provides a strong structure and a staple base for plant roots while allowing water to drain freely providing maximum oxygen to the root zone, preventing rotting and excess acidity. Hydro Rokz's porous inner core absorbs water and nutrients releasing them to the plant as required.

45 Liter Leca Stone

Item **LEC1004** Each \$21.95

Burlap for Microgreens

Untreated Agricultural Grade. Price per roll of 100 yards



10 Inch

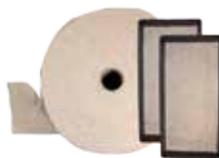
Item **MGBURLAP10** 1-4 \$42.00
5+ \$39.00

9 Inch

Item **MGBURLAP9** 1-4 \$42.00
5+ \$39.00

BioStrate Felt

Comes in rolls 9" and 10" wide and 120' long. BioStrate Felt™ absorbs and retains water while providing an inert environment for dense healthy root development. The blend of biopolymers and natural fibers is designed to manage water efficiently for optimal growth in a variety of hydroponic systems. BioStrate will maintain its structural integrity for the life of your product and won't clog filters. Custom widths are available. This product has been tested and certified both nationally and internationally for biobased content and compostability in an industrial setting.*



Item **MGFELT** \$64.95
Item **MGFELT** 8+ \$59.95

PERLITE GROW BAGS

Horticultural perlite has an excellent record as a propagating and growing medium. Since it is free draining, it is also extremely well-aerated. Its neutral pH, negligible nutrient content, and freedom from pests, pathogens, and weed seeds combine to make it an excellent growing medium for hydroponic culture. Each bag, approximately 42 inch long and 8 inch in diameter, is sealed and designed to hold three tomato plants



Empty Perlite Grow Bag, 3 mil

Item **PER1001** Each \$0.82

Empty Perlite Grow Bags, 3 mil, Case of 250

Item **PER1001** 1-4 \$97.50
Item **PER1001** 5-9 \$95.00
Item **PER1001** 10+ \$92.50

Perlite Bag Sealer, 12 inch with a 3 mm thick seal



Item **PER4001** Each \$78.40

Filled Perlite Grow Bag (1-1/3 cubic foot of perlite)

Item **PER3000** 1-100 \$6.75
Item **PER3000** 101-999 \$5.80
Item **PER3000** 1000+ \$5.45

5 GALLON POLY GROW BAGS

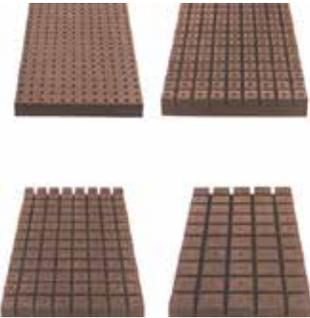
Poly grow bags are a great, inexpensive container for your plants. The white exterior reduces heat build-up and the black interior keeps light from root growth. 400 bags in a case. Cost efficient and simple disposal. Size: 9W x 8L x 17-1/2H inches



Grow Bag with Holes, white/black

Item **BAG3001** 1-499 \$0.50
Item **BAG3001** 500-999 \$0.36
Item **BAG3001** 1000-2499 \$0.33
Item **BAG3001** 2500+ \$0.29

OASIS HORTICUBES



A low density, high-drainage foam, Oasis Horticulture growing medium is specifically engineered for hydroponics seed germination of vegetables and herbs. This growing media is designed to drain off excess water from the base of the seed, allowing an optimal balance of oxygen and water, even when the foam is completely saturated. Horticulture growing medium is sterile upon receipt and provides a clean start, pathogen-free, environment which reduces disease and insect problems for plant germination.

- Pre-dibbled holes make it easy to set the seed into place in the media

Case of 20 sheets

Thincut 276ct. Single Dibble

Item **OAS1100**

Thincut 276ct. Multi Dibble

Item **OAS1500**

Regular 162ct. Singl Dibble Bottom Groove

Item **OAS2500**

1 1/2" 50ct. Single Dibble, Bottom Groove

Item **OAS3500**

1 1/4" 104ct. Multi Dibble, Top Groove

Item **OAS4200**

1 1/4" 104ct. Single Dibble, Bottom Groove

Item **OAS4500**

OAS3500 & OAS4500 have no quantity breaks

1-4 cases \$92.50
5-9 cases \$91.10
10-24 cases \$89.05
25+ cases \$87.70

*Order 16 cases of Oasis and receive free shipping

ORGANIC ELLEPOT GROW PLUGS

Meeting the USDA organic standards, Ellepots are sustainable organic growing plugs. They provide fast, healthy root growth, even vegetative growth, higher take rates, and reduced labor costs. 2 plug sizes are available: A 23mm plug suitable for leafy crops that fit perfectly into CropKing's NFT channels and a 35mm plug suitable for vine crops and longer-term crops. For large volume orders (truckload) call for pricing and available tray configurations.



ELLEPOT PLUG SIZE	
23mm	35mm
Standard Tray (10.5" x 21")	
105 cells	50 cells
128 cells	72 cells
True Tray (10" x 20")	
102 cells	-
84 cells	-

Available in pallet quantities, call for pricing.



AJK0200

AIK0060
AIK0100

AIR INFLATION KIT

For double poly greenhouses you'll need an air inflation kit to provide the "dead air space" between the two covers. Our air inflation kit contains the cover blower (60 cfm), the air jumper tube, damper and the mounting bracket. Outside vent not included

Air Inflation Kit, 60 CFM

Item **AIK6000** Each \$90.00

AIR INFLATION FAN

Air Inflation Fan, 60 CFM with Damper

Item **AIK0060** Each \$58.00

Air Inflation Fan, 70 CFM

Item **AIK0100** Each \$118.00

AIR JUMPER TUBE

Use this tube when connecting double layer poly film from roof to sidewall or endwall to allow pressurized air in both locations.

Air Jumper Tube

Item **AJK0200** Each \$15.30

GREEN-SHIELD DISINFECTANT

(Not for direct application on plants)

Green Shield is used to disinfect greenhouse structures, tools, floors, benches, etc., and is longer lasting, yet less irritating than bleach.

When used as part of Integrated Pest Management, Green-Shield can minimize the occurrence of disease problems in a crop by killing the resting structures of plant pathogens before they infect your crop.

Green Shield, 1 Gallon

Item **FUN1010** Each \$39.95



BRACKET

2 x 4 inch Bracket Kit, 1.315 inch, includes bracket and bolt



Item **BRA2400** Each \$4.48

2 x 4 inch Bracket Kit, 1.660 inch, includes bracket and bolt

Item **BRA2402** Each \$4.22

2 x 4 inch Bracket only

Item **BRA2401** Each \$3.83



2 x 6 inch Bracket only

Item **BRA2600** Each \$3.27

CROSS CONNECTORS

1-3/8 x 1-3/8 inch Cross Connector with bolts

Item **CRO1315** Each \$1.80

1-5/8 x 1-3/8 inch Cross Connector with bolts

Item **CRO1660** Each \$2.16

2 x 1-3/8 inch Cross Connector with bolts

Item **CRO2000** Each \$2.20



BRACE BANDS

1-3/8 inch Brace Band

Item **BRT1315** Each \$0.93

1-5/8 inch Brace Band

Item **BRT1660** Each \$1.32

1.90 inch Brace Band

Item **BRT1900** Each \$1.32



INSULATED ALUMINUM DOOR

White 3-inch aluminum door; and 3 inch aluminum with a nailing flange. The door system comes pre-hung with 3 stainless steel hinges, weather stripping and door panel seals included. It is a 4 way universal system with center lite panel with lockset included.

White 3 inch aluminum door

Item **DOO1000** Each \$382.20

PATCH TAPE

Poly Patch Tape, 48 Feet

2 inch Item **PAT2000** Each \$8.95

4 inch Item **PAT4000** Each \$17.95

6 inch Item **PAT6000** Each \$24.95

Poly Patch Tape, 24 Feet

10 inch Item **PAT9999** Each \$42.95

WHITE FELT TAPE

Provides a soft barrier between the greenhouse frame and cladding. Prevents heat from penetrating to poly sheet and degradation as film does not rub against the frame.

1/8" thick x 1 1/2" wide x 48' long

Item **TAP2000** 1-9 \$19.95

Item **TAP2000** 10+ \$16.95



TRY BEFORE YOU BUY WITH ONE OF OUR GROWER'S WORKSHOPS

Whether you're looking for a 2 day introduction, or a 5 day intensive, we have something to fit your needs!

Turn to page 60 for more details.

GREENHOUSE COVERING - TUFFLITE FILM

Tufflite Infrared™ – a Tufflite greenhouse product designed to last up to three years. Contains both the Drip-Less feature and an additive that will delay the exit of infrared waves from the greenhouse, maintaining heat factors and saving energy.

- Reduced energy costs.
- Improved light diffusion reduces shadows.
- Improved night time heat retention allows for lower fuel bills.
- Rapid payback in fuel savings after only a few short months.

Combine the extraordinary clarity and light transmission of Tufflite IV with Tufflite Infrared and reap the rewards. Your combination double of Tufflite IV on the outside and Tufflite Infrared on the inside gives you:

- The highest light transmission.
- Anti-condensation protection.
- Energy savings.

6 mil IR/TES Film, 4-year: INSIDE LAYER

20' x 100'	Item FIL2010	Roll \$220.00
20' x 130'	Item FIL2013	Roll \$286.00
24' x 100'	Item FIL2410	Roll \$264.00
24' x 130'	Item FIL2413	Roll \$344.00
24' x 150'	Item FIL2415	Roll \$396.00
32' x 100'	Item FIL3210	Roll \$352.00
32' x 130'	Item FIL3213	Roll \$458.00
32' x 150'	Item FIL3215	Roll \$528.00
40' x 100'	Item FIL4010	Roll \$440.00
40' x 130'	Item FIL4013	Roll \$572.00
40' x 150'	Item FIL4015	Roll \$660.00
48' x 100'	Item FIL4810	Roll \$528.00
48' x 130'	Item FIL4813	Roll \$687.00
48' x 150'	Item FIL4815	Roll \$792.00

Tufflite IV™ – the one and only, original “super-clear” greenhouse covering. After all these years and all the imitators, Tufflite IV is still unmatched in PAR (photosynthetic active radiation) transmission.

- Retains Clarity – Tufflite IV stays clear – no discoloration or cracking. Even after three years, it looks practically new.
- Outstanding Durability – proprietary manufacturing yields tough sheeting that resists tears, punctures and UV degradation.
- Easy Installation – heavy duty packaging protects every roll and improved center slit folding makes installation fast and easy.

6 mil UVA Film, 4-year: OUTSIDE LAYER

14' x 100'	Item FIL1401	Roll \$157.25
20' x 100'	Item FIL2001	Roll \$192.00
20' x 130'	Item FIL2031	Roll \$248.00
20' x 150'	Item FIL2051	Roll \$287.00
24' x 100'	Item FIL2401	Roll \$230.00
24' x 130'	Item FIL2431	Roll \$299.00
24' x 150'	Item FIL2451	Roll \$345.00
32' x 100'	Item FIL3201	Roll \$306.00
32' x 130'	Item FIL3231	Roll \$398.00
32' x 150'	Item FIL3251	Roll \$459.00
40' x 100'	Item FIL4001	Roll \$383.00
40' x 130'	Item FIL4031	Roll \$498.00
40' x 150'	Item FIL4051	Roll \$574.00
48' x 100'	Item FIL4801	Roll \$460.00
48' x 130'	Item FIL4831	Roll \$597.00
48' x 150'	Item FIL4851	Roll \$689.00

6 mil White UVA Film, 4-year: OUTSIDE LAYER

24' x 100'	Item FIL6240	Roll \$257.00
32' x 100'	Item FIL6320	Roll \$343.00
40' x 100'	Item FIL6400	Roll \$429.00
48' x 100'	Item FIL6480	Roll \$593.00

One year overwintering Film 4 mil White Film, 70% Opacity:

24' x 100'	Item WHI2410	Roll \$115.00
24' x 110'	Item WHI2413	Roll \$125.00
24' x 125'	Item WHI2425	Roll \$142.00
24' x 150'	Item WHI2415	Roll \$180.10
24' x 200'	Item WHI2420	Roll \$227.00
32' x 100'	Item WHI3210	Roll \$152.00
32' x 110'	Item WHI3211	Roll \$167.00
32' x 125'	Item WHI3225	Roll \$190.00
32' x 150'	Item WHI3215	Roll \$228.00
40' x 100'	Item WHI4010	Roll \$190.00
48' x 100'	Item WHI4810	Roll \$228.00
48' x 150'	Item WHI4815	Roll \$350.00

Black Nursery Vapor Barrier

24' x 130'	Item FIL1003	Roll \$150.00
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8 mil Polycarbonate Sheets

H-Profile, 8MM	Item POL1011	24 Feet \$27.55
U-Profile, 8MM	Item POL1012	12 Feet \$12.90
4 x 8'	Item POL1010	Sheet \$42.05
4 x 9'	Item POL1009	Sheet \$47.25
4 x 10'	Item POL1015	Sheet \$52.05
4 x 11'	Item POL1027	Sheet \$56.85
4 x 12'	Item POL1014	Sheet \$62.05
4 x 15'	Item POL1025	Sheet \$78.75
6 x 8'	Item POL1020	Sheet \$63.05
6 x 9'	Item POL1016	Sheet \$71.25
6 x 10'	Item POL1021	Sheet \$79.05
6 x 11'	Item POL1017	Sheet \$86.15
6 x 12'	Item POL1018	Sheet \$95.05
6 x 13'	Item POL1022	Sheet \$102.90

Film should not come into contact with PVC or chlorine bleach

WIGGLE WIRE

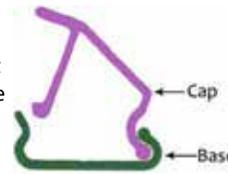
Wiggle wire poly lock is easy to use and is an effective method of attaching your polyfilm roof and/or shade cloth. Wiggle wire lock will hold from 4 mil to 20 mil thickness of material. Use one wire to hold the roof in place and then use a second wire to hold your shade cloth. When it is time to remove the shade cloth, you will not disturb the roof plastic. Universal Base (WIG2000) is used on the top of the end arch to cap the end wall covering. Standard Base (WIG1000) is used along the length of your greenhouse.



4 Foot Wiggle Wire, 1.25 inch wide	Item WIG100	Each \$1.00
8 Foot Standard Wiggle Wire Base	Item WIG1001	Each \$8.00
12 Foot Standard Wiggle Wire Base	Item WIG1000	Each \$12.00
24 Foot Universal Wiggle Wire Base	Item WIG2000	Each \$44.14

QUICKLOCK

QuickLock is our extruded aluminum poly locking device. It is designed to provide an attractive and efficient method of securing either single or double layers of poly greenhouse film. The base is screwed onto the baseboard of your greenhouse, as well as the end arches if desired. Then, the poly is laid over the base, pulled down to remove wrinkles, and then the top cap is snapped into place. Over 300 lbs. holding power per lineal foot (does not bend).



10 Foot Quicklock Cap Only	Item SUR1003	Each \$10.10
10 Foot Quicklock Base Only	Item SUR1004	Each \$6.95

SUN CLEAR

Stops Condensation and Increases Light Transmission
When diluted and applied to dry plastic surfaces, such as flexible or rigid greenhouse coverings, prevents the formation of water droplets. As a result, the plastic remains clear, admitting up to 50% more light. Dripping, which can be injurious to plants and is annoying to personnel, is eliminated. For best results Sun Clear should be applied with a sprayer producing a forceful spray. Both new and old plastic materials can be treated. If new plastic is to be treated, Sun Clear is best applied 2 weeks after installation of the plastic this is to allow oxidation of oily residues on the new plastic to achieve maximum adhesion of Sun Clear. The Sun Clear coating reduces water surface tension, so that condensation occurs rather like a film and stops dripping.



Sunclear, 1 Quart	Item SUN1000	Each \$39.95
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SHADE

SHADE CLOTH

Our shade cloth is a high quality, knitted shade net that resists tearing. Unlike woven shade cloth, our knitted shade net will not unravel at the edges or at a tear. It contains UV inhibitors and resists deterioration better than polypropylene. There is also less wind resistance due to the knitted construction. Available widths are 8', 12', 20', 26', 36'. Other types, sizes and colors are available by custom order.



White shade cloth is ideal for cooler greenhouses as it keeps the heat off the plastic and allows more light in than black shade cloth. It is available in 40% and 50% shade, in rolls 26 x 130 foot, or can be customized. Please call your salesperson at 330-302-4203.

Add Seaming Charge of .30 per foot for custom widths. **\$25 Minimum order fee may apply**

40% White Shade Cloth

8' x 130'	Item SHA2016	Each \$189.70
26' x 130'	Item SHA1012	Each \$551.60
Per SqFt	Item SHA1013	1-1999 \$0.19
Per SqFt	Item SHA1013	2000-2999 \$0.18
Per SqFt	Item SHA1013	3000+ \$0.17

50% White Shade Cloth

8' x 130'	Item SHA2017	Each \$262.80
26' x 130'	Item SHA1050	Each \$769.40
Per SqFt	Item SHA1051	1-1999 \$0.26
Per SqFt	Item SHA1051	2000-2999 \$0.24
Per SqFt	Item SHA1051	3000+ \$0.23

40% Black Shade Cloth

Per SqFt	Item SHA1011	1-1999 \$0.15
Per SqFt	Item SHA1011	2000-2999 \$0.14
Per SqFt	Item SHA1011	3000+ \$0.13

50% Black Shade Cloth

Per SqFt	Item SHA1022	1-1999 \$0.15
Per SqFt	Item SHA1022	2000-2999 \$0.14
Per SqFt	Item SHA1022	3000+ \$0.13

60% Black Shade Cloth

Per SqFt	Item SHA1032	1-1999 \$0.15
Per SqFt	Item SHA1032	2000-2999 \$0.14
Per SqFt	Item SHA1032	3000+ \$0.14

70% Black Shade Cloth

Per SqFt	Item SHA1042	1-999 \$0.16
Per SqFt	Item SHA1042	2000-2999 \$0.15
Per SqFt	Item SHA1042	3000+ \$0.14

Clip-Its Shade Cloth Fasteners



Item CLI1000
1-99 \$0.35
100 + \$0.30

We recommend spacing Clip-Its every 3 foot on sides and ends

ALUMINET® COOL SHADE

ALUMINET is a special knitted screen made from metalized HDPE. The fibers are produced from mono-oriented HDPE, giving the fiber durability and longevity. After an aluminum metalization process, the films are covered with a special antioxidation coating. The net is knitted into a precise uniform texture; meets the ASTM-D 3887 standard. Available widths 7', 14', 21', 28'.

SPECIFY %: Minimum order fee may apply.

30%, 40%, 50% Aluminet, per Square foot

Item **SHA3000** Each \$0.31

60% Aluminet, per Square foot

Item **SHA3100** Each \$0.34

Ez Kool Ray Liquid Shade is a liquid shading compound for coating greenhouse glass, fiberglass or polyethylene. Effectively controls the rays of summer sun and prevents burning or scalding of plants.

Standard Dilution is 1500 Sq. Ft.



Ez Kool Ray Liquid Shade, 1 Gallon

Item **SHA1000** Each \$28.50

GROUND COVER

WOVEN GROUND COVER

Sunbelt Brand

Woven ground cover used on the greenhouse floor or outdoors in nurseries for displaying potted stock. Economical ground cover 3.2 ounce fabric, U.V. stabilized and permeable. 100% polypropylene.

3.2 Ounce Black Ground Cover

6' x 300'	Item GRO1001	1-4 \$147.55
6' x 300'	Item GRO1001	5+ \$138.35
12' x 300'	Item GRO1007	1-4 \$300.70
12' x 300'	Item GRO1007	5+ \$281.90
15' x 300'	Item GRO1006	1-4 \$376.30
15' x 300'	Item GRO1006	5+ \$352.80

3.2 Ounce White Ground Cover

12' X 300'	Item GRO1009	1-4 \$322.80
12' X 300'	Item GRO1009	5+ \$302.65
15' X 300'	Item GRO1008	1-4 \$396.05
15' X 300'	Item GRO1008	5+ \$371.30

KEEP UNWANTED PESTS OUT

Decrease unwanted pests and expensive pesticide usage naturally!

U.V. stabilized Insect Screens correctly installed prevent insect penetration, yet provide maximum possible air flow that is essential for optimal crop yield.

All greenhouse openings including intake vents, service door, etc., should be screened for best results.

Thrip Insect Screening 75 Mesh

134 inch Width and can be seamed

Item **INS4000** Each \$0.84 per square foot



For a complete insect exclusion system for a CropKing Greenhouse Call for pricing at 330-302-4203

LIGHTS

Hortilux HPS Bulbs

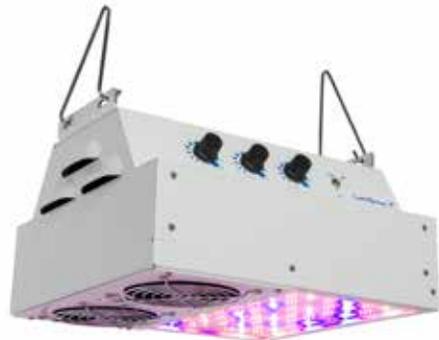


Extend the growing season to 365 days a year with Eye Hortilux™ grow lamps. Choose Eye Hortilux lamps to raise your lighting system to a new level of performance, optimizing spectral energy levels that promote vigorous plant growth.

EN lamps are completely lead-free and contain less mercury than standard HPS lamps. The environmentally friendly lamps (EN) can usually be disposed of without being recycled; however, please check your state laws first, which may be more strict than federal law. For information on how to recycle your lamp, visit www.lamprecycle.org.

Hortilux Super HPS Enhanced Spectrum grow lamps fine-tune your lighting system to provide optimum spectral energy levels that promote vigorous plant growth. The Eye Super HPS EN Grow Lamps provide 17% more total energy and 25% more energy in the violet, blue, and green spectrum than standard high pressure sodium lamps. These lamps are environmentally friendly and pass EPA TCLP test criteria as non-hazardous waste.

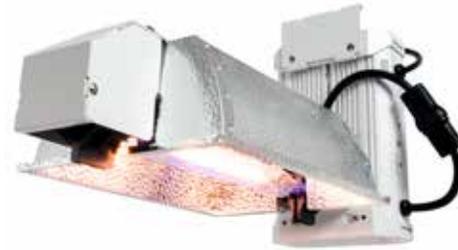
400W	Item LIG2014	Each \$89.95 6+ \$79.95
600W	Item LIG2015	Each \$89.95 6+ \$79.95
1000W	Item LIG2016	Each \$89.95 6+ \$79.95



System, 88-264V (auto-switching) The Pro 325 system is engineered for commercial greenhouses and controlled environment agriculture (CEA) environments. Like all LumiGrow solutions, the Pro 325 light eliminates waste inherent to HID lights by focusing photons in plants' primary response regions rather than in spectral regions plants can't use. All of the light produced by the Pro 325 system is productive for plants, yielding 70% energy savings versus the 1000W HID lights they replace.

Item **LIG1000** Each \$599.00

Commercial DE Enclosed Lighting System, 240V



- DE1000Zh Reflector: Hydrofarm engaged a renowned American lighting engineer to design the most efficient DE Enclosed type reflector on the market. This reflector delivers focused light, and effectively dissipates heat while operating the DE bulb at ideal temperatures, for maximum light output and lamp life.
- Double-ended system delivers higher PAR value with incredible uniformity
- Enclosed design for maximum focused light output, optimum heat management, and longer lamp life
- Highly efficient in overlapping multi-light configurations
- Premium aluminum European hammer-tone interior: 99.85% pure, 95% reflectivity
- European-made VS K12 x 30S high temperature lamp holders
- DE Bulb: This package features a European made premium DE lamp with a rated PAR output of 2100 umol

Item **LIG6010** Each \$424.95

GLX



GLX Series Reflector. Complete System includes Ballast, Reflector, and Bulb. Powerful and lightweight, this 1000W Commercial Greenhouse System features our High Efficiency GLX reflector with an attached 1000W halide ballast.

- 8 foot Power Cord with 240v Plug
- Warranty: 2-Year Ballast; 1-Year Reflector and Bulb
- Ships in 3 boxes

Magnetic Ballast 1000W Halide
Item **LIG7502** Each \$235.00

GLX Reflector (7¼ H x 12¼ W x 18 ¼ L inches)
Item **LIG7503** Each \$ 74.95

Sunmaster 1000 Watt Horizontal Halide Bulb
Item **LIG7504** Each \$ 49.95

GLX Lens System
Item **LIG7501** Each \$ 14.95

LED

Intense Light, Intense Savings

The powerPAR Greenhouse LED Fixture, available in three power variations (530W, 390W, and 185W), delivers a higher PPFD (usable light that actually reaches the plant) per watt value to the plant canopy than other equivalent LED greenhouse fixtures. The powerPAR's scientifically developed horticultural growth spectra and proprietary, patented optics ensure that nearly every single watt of energy is used for optimum plant growth and the highest yields.



- All aluminum construction with white gloss finish protects against corrosion in humid environments
- Patented Digital Distribution™ optical technology ensures that 65% of the light emitted is contained within the 50° beam angle
- Two-part, high-temperature silicone potting protects LED and wiring connections from moisture
- ETL/cETL listed for damp locations
- 50,000 hour life to L70
- Made in USA

powerPAR 200W Greenhouse LED Fixture
Item **LIG6020** Each \$889.95

powerPAR 400W Greenhouse LED Fixture
Item **LIG6040** Each \$1049.95

powerPAR 600W Greenhouse LED Fixture
Item **LIG6060** Each \$1499.95



Shop online at www.CropKing.com

HID

The Commercial DE Lighting System is state-of-the-art double-ended technology that uniformly delivers optimum PAR value. The Commercial DE Lighting System gives you the unique ability to remove the ballast from the reflector so it can be used remotely, allowing you to operate the ballast outside of your grow room, to effectively reduce heat load.

The Phantom Ballast Commercial DE drives maximum PAR value. This ballast is designed with a high precision microprocessor that makes it totally silent, lightweight, highly efficient, and extremely reliable.

- High frequency design optimized for double-ended 1000W lamps
- High-precision microprocessor control
- Four-way dimming: 60%, 75%, 100%, and Super Boost (up to 1150W lamp output)
- Robust commercial design
- Superior reliability
- LED status indicator
- Internal RF shielding
- Patented ignition control
- End of lamp life signal
- Auto restrike feature protects valuable lamps from damaging power interruptions
- Cooling fins for maximum heat dissipation
- Suitable for use in damp locations
- Features an IEC power connection and comes with a 8' 240V 16/3 AWG power cord
- 240v

Commercial DE Open Lighting System, 240V



DE1000 Lh Reflector: Hydrofarm engaged a renowned American lighting engineer to design the most efficient DE open type reflector on the market. This reflector delivers uniform growth over a broad footprint, and effectively dissipates heat while operating the DE bulb at ideal temperatures, for maximum light output and lamp life.

- Double-ended system delivers higher PAR value with incredible uniformity
- Open design for maximum light output, optimum heat management, and longer lamp life
- Highly efficient in overlapping multi-light configurations
- Premium aluminum European hammer-tone interior: 99.85% pure, 95% reflectivity
- European-made VS K12 x 30S high temperature lamp holders
- DE Bulb: This package features a European made premium DE lamp with a rated PAR output of 2100 umol

Item **LIG6000**

Each \$424.95

Fluorescent

Hydrofarm's T5 EnviroGro system delivers performance, flexibility, and high lumen output in any growing environment. These low-profile systems allow you to choose multiple hanging configurations to meet your garden's design. They combine a specular aluminum interior with energy-efficient/high-output T5 bulbs and put out double the light energy of normal fluorescent systems. **T5's cannot ship UPS**, call our sales staff to arrange shipping

T5 4FT Fixture with Bulb

- T5 fluorescent bulb includes electronic ballast, clips, & fixture
- Low heat
- No frequency flickering
- 6' power cord
- "Daisy-Chain" cable - Connect up to 5 units
- Includes fluorescent 6400K tube

Item **LIG0037**

Each \$26.95

T5 4FT 4 Bulb Fixture with Bulbs



- Powder coated steel housing
- Low profile
- Hangs 3 ways - overhead, vertical, or horizontal
- 10' grounded power cord
- Includes fluorescent 6400K tubes
- Rated up to 18,800 lumens
- 3"H x 13½"W x 46"L

Item **LIG0016**

Each \$124.95

T5 4FT 6 Bulb Fixture with Bulbs



- Dual On/Off switches allow you to control the amount of lumens as needed (6 and 8 tube models only)
- Powder coated steel housing
- Low profile
- Hangs 3 ways - overhead, vertical, or horizontal
- 10' grounded power cord
- Includes fluorescent 6400K tubes
- 2.75"H x 19.75"W x 46.25"L

Item **LIG0017**

Each \$162.95

T5 4FT 8 Bulb Fixture with Bulbs



- Dual On/Off switches allow you to control the amount of lumens as needed (6 and 8 tube models only)
- Powder coated steel housing
- Low profile
- Hangs 3 ways - overhead, vertical, or horizontal
- 10' grounded power cord
- Includes fluorescent 6400K tubes
- 3"H x 26"W x 46"L

Item **LIG0018**

Each \$199.95

T5 4FT 12 Bulb Fixture with Bulbs



- 3"H x 39"W x 46"L
- Rated up to 60,000 lumens
- Includes 12 54W HO T5 tubes (6400k)
- Multiple on/off switches on 6, 8, and 12 tube fixtures allow you to control the amount of light output/coverage as needed
- High efficiency specular aluminum for maximum reflectivity
- Powder coated steel housing
- Hangs 3 ways - overhead, vertical, or horizontal
- 10' grounded, 120 volt power cord

Item **LIG0019**

Each \$333.95



HAVE QUESTIONS?

Talk to one of our experienced sales or service specialists about what products best fit your needs!

330-302-4203

TRAYS

Seedling Starter Tray holds 72 seedlings

Item **TRA0072** Each \$1.70

10/20 Seed Tray with Holes

Item **TRA1100** 1-50 Each \$1.40

10/20 Seed Tray with Holes, Case of 100

Item **TRA1100** 1-9 Each \$122.00

Item **TRA1100** 10+ Each \$117.00



10/20 Seed Tray without Holes

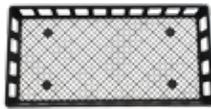
Item **TRA1101** 1-50 \$1.40

10/20 Seed Tray without Holes, Case of 100

Item **TRA1101** 1-9 \$122.00

Item **TRA1101** 10+ \$117.00

Web Seedling Tray
50 per case



Item **TRA1104** 1-49 Each \$1.00

Item **TRA1104** 50-200 Each \$0.95

Item **TRA1104** 201+ Each \$0.90

HUMIDITY DOMES

Domes fit on standard and rapid rooter starter trays and keep seedlings or clones moist until they develop root systems. We recommend using these and propagation mats for a fast healthy start with seeds or clones.

2-1/2 Inch Humidity Domes

Item **DOM3000** Each \$2.50

7 Inch Humidity Domes

Item **DOM6000** Each \$6.50

NET POTS

Net pots are used in hydroponics with several types of growing media for either seeding, propagation, or growing on NFT or artificial media systems. They are excellent to use in science fair projects since the root system can remain visible when lifted out of the nutrient solution. With net pots, root growth can be monitored and demonstrated easily, without damaging the roots.



2 inch Net Pot

Item **NET1000-E** 1-100 Each \$0.20

Item **NET1000-E** 101-999 Each \$0.10

Item **NET1000-E** 1000+ Each \$0.05

2 inch Net Pot, Case of 5,418

Item **NET1000** Case \$230.85

PROPAGATION HEAT MATS



The **HEAVY DUTY** modular commercial heat mats will provide uniform heat for hundreds of seedlings or cuttings. Bottom heat is one of the most important and effective ways to improve germination and rooting.

- Increases success of seedlings and cuttings
- Warms root area 10-20°F over ambient temperature to improve germination
- Light, watering and planting information on mat
- Waterproof construction
- 6 foot power cord
- The only UL Listed seedling heat mats on the market!
- 50% thicker construction
- Rugged and durable with waterproof connectors
- Plug into Digital Heat Mat Thermostat (required, sold separately)

60 x 21 inch Propagation Heat Mat, 140 watts, can add up to 4 add-on units

Item **PRO6000** Each \$129.95

60 x 21 Add-On Propagation Heat Mat, 140 watts

Item **PRO6001** Each \$114.95

20 x 20 inch 2 Tray Propagation Heat Mat

Item **PRO1002** Each \$46.95

48 x 20 inch 4 Tray Propagation Heat Mat

Item **PRO1000** Each \$79.95

THERMOSTAT FOR PROPAGATION HEAT MATS

Thermostat for use with propagation heat mats. It keeps the propagation mat set at the proper temperature for optimum seed germination and cutting growth. Unit plugs into the mat in a receptacle on the backside.



- Digital temperature controller for heat mats
- Provides constant optimum temperatures for specific crops
- Controls temperature in colder or warmer environments
- Illuminated indicator light; 3-prong ground plug

Digital Thermostat, 1 Plug

Item **THE1000** Each \$39.95

BERRY SEEDER

The #1 Name in Affordable Seedling Equipment!



- Seed up to 250 trays per hour with unequaled accuracy
- Transparent seeder body allows for easy inspection for clogged holes and/or misses.
- Seed the whole tray at once, not one row at a time
- Corrosion resistant

Berry Seeder Complete System includes seeder, both seeder plates, dibbler, inspection light, seed hopper with stand, and shopVAC.

Complete Seeder System

Item **SEE1000** Each \$1094.00

Seeder System with Base (plate not included)

Item **SEE1001** Each \$574.00

200 Seed Base Plate for Pelletized Seeds

Item **SEE1002** Each \$158.00

200 Seed Base Plate for Precision Seeds

Item **SEE1003** Each \$186.00

Dibbler Plate

Item **SEE1004** Each \$176.00

* additional sized plates available



Let's be friends!

Facebook:

www.facebook.com/CropKing

Instagram:

@CropKingInc

Twitter:

@CropKingInc

DIGITAL TIMER

Multiple Purpose 2- Outlet Digital Timer

- For Indoor use only
- Variable ON/OFF times - up to +15 minutes for added security.
- Auto adjusts to sunset/sunrise time for dusk/dawn setting.
- Automatic Daylight Saving Time Option.
- Battery backup with low battery indicator.
- Up to 28 ON/OFF settings.
- 2 timed receptacles.
- Sunrise, sunset, daily, weekday, weekend options.



Limited one year warranty

Intermatic Digital Timer

Item **TIM2008**

Each \$34.95

IRRIGATION TIMER

- Six independent programs can run concurrently
- Up to 9 daily cycle starts per program; or, loop watering optional in all 6 programs for unlimited cycles
- Station timing adjustable from one minute to 24 hours in one minute increments
- Automatic, semi-automatic, manual, and timed manual operation
- Programmable "system check" cycle that can be initiated at any station
- Non-volatile memory holds program information during power outages of any length
- 10 year lithium battery (included) keeps real-time during power outages of any length



Sequence Timer:

4 Station

Item **SEQ0050**

Each \$420.45

8 Station

Item **SEQ1000**

Each \$460.80

12 Station

Item **SEQ1001**

Each \$518.75

18 Station

Item **SEQ1002**

Each \$705.00

AUTOPILOT ANALOG 24HR RECYCLING TIMER

Controls any application requiring a device to be turned on and off at precise intervals. This timer has a wide range of uses including controlling hydroponic pumps, CO2 injection, turning on and off exhaust fans, misters and more. There is no programming required, it is easy to set and operate. Cycle timing is adjustable for operation during the day, night, or 24 hours.

- Controls 120V pumps, fans, and more on a periodic repeat cycle
- Adjustable "ON" duration spans from 15 seconds to 13 hours
- Adjustable "OFF" duration spans from 15 seconds to 13 hours
- Functions during the day, during the night, or 24 hours

Item **TIM2009**

Each \$69.95

ARKAL FILTERS

3/4 inch Arkal Filter, 140

Mesh/100 microns:

Item **STR1009** Each \$25.00

1 inch Arkal Filter, 140

Mesh/100 microns:

Item **STR1010** Each \$79.00

3/4 inch Replacement Cartridge, 140 Mesh:

Item **STR1013**

Each \$16.00

1 to 1-1/2 inch Black Replacement Cartridge, 140 Mesh:

Item **STR1011**

Each \$38.00

Replacement O-Ring for 3/4 inch Arkal Filter

Item **STR1016**

Each \$3.50

Replacement O-Ring for 1 inch Arkal Filter

Item **STR1015**

Each \$5.00



SOLENOID VALVE

Heavy duty design for long life, versatile performer. Excellent for use in drip systems because it operates well at extremely low flow.

1 inch Solenoid Valve,

24 Volt, PVC

Item **SOL4000**

Each \$31.00



T STRAINER

Use a T strainer on the inlet and/or outlet side of your nutrient pump to strain out any debris that may find its way into the nutrient tank. This commercial grade strainer may be easily cleaned and flushed. The 1-1/2" strainer comes with a 100 mesh nylon screen.



1-1/2 inch T Strainer,

100 Mesh

Item **STR1000**

Each \$82.45

1-1/2 inch Clear Cartridge Cover

Item **STR1001**

Each \$44.35

2 inch Black T Strainer, 100 Mesh

Item **STR3000**

Each \$138.60

100 Mesh Strainer

Item **STR3001**

Each \$94.30

O-Ring for STR3000

Item **STR3002**

Each \$3.50

50 Mesh Strainer

Item **STR3003**

Each \$95.00

1-1/2 inch Strainer Screen, 100 Mesh

Item **STR1003**

Each \$25.95

1-1/2 inch Strainer Screen, 140 Mesh,

Item **STR1006**

Each \$25.95

1-1/2 inch Strainer Screen, 12 Mesh

Item **STR1007**

Each \$24.85

Replacement O-Ring for 1-1/2 inch T-Strainer set of two one small, one large.

Item **STR1012**

Each \$3.25

TANKS

25 Gallon Polyethylene Nutrient Tank and Lid

Used for Small Home Systems

Item **TAN2001**

Each \$100.50

52 Gallon Polyethylene Tank and Lid

Used for CropKing's Fertroller, Injection Systems, and as a nutrient mixing tank

Item **TAN3000**

Each \$189.95

4' x 8' x 12" Aqua Blue Polyethylene Tray

Used for 200 Gallon Aquaponics System Tray

Item **TAN4000**

Each \$520.00

200 Gallon Blue Round Polyethylene Tank

Used for Aquaponics System Tank

Item **TAN4001**

Each \$370.00

300 Gallon Blue Round Polyethylene Tank

Used for Aquaculture System Tank

Item **TAN4002**

Each \$430.00



3 Quart Round Polyethylene Tank and Lid

Used for Fertroller sample pot

Item **TAN4003**

Each \$24.50

SUBMERSIBLE PUMPS

NK Little Giant Pumps are for commercial, industrial, and home use worldwide where liquid must be transferred or recirculated. Applications include aquariums, swimming pools, water displays, ice makers, air conditioners, boat bailing, fuel oil transfer, circulating water for welding and pipe threading machines, pumping mild chemicals such as soap solutions, acids, plating solutions and fertilizers.



NK1 Little Giant Pump

- 210 GPH @ 1 ft
- Operates submersed
- Corrosion-resistant nylon housing
- Sump-type screened inlet
- 1/4" MNPT outlet accepts 1/2" I.D. tubing
- Thermally protected
- 70 watts, 1 Amps
- 4.13 x 0 x 4.56 inch LWH
- 3.67 pounds

NK1 Little Giant Pump

Item **PUM1000** Each \$85.00

NK2 Little Giant Pump

- 325 GPH @ 1 ft.
- Operates submersed.
- 6' cord
- Corrosion-resistant nylon housing
- Five position options
- 1/4" MNPT outlet accepts 1/2" I.D. tubing
- Thermally protected
- 100 watts, 1.7 Amps
- 4.13 x 0 x 4.56 inches LWH
- 4.5 pounds

NK2 Little Giant Pump

Item **PUM2000** Each \$103.00

The Active Aqua is designed to run completely submerged in water. It may be utilized in either fresh water or saltwater, but not in foreign fluids, flammable liquids, or any chemical; also used for mixing. 1/2 inch discharge. Aeration Kit included.

400 GPH Submersible Pump

Item **PUM8000** Each \$26.95

1000 GPH Submersible Pump

Item **PUM8200** Each \$69.95



CIA Little Giant Pumps applications include commercial, industrial, and home uses where liquid must be transferred or recirculated.



6 CIA Little Giant Pump

- 1/3 hp shaded pole motor with overload protection
- Designed for continuous duty
- Epoxy coated cast iron housing
- 1-1/4" (31.7 mm) adapter and 3/4" (19 mm) garden hose adapter available
- Carbon/ceramic shaft seal
- Upper and lower sintered sleeve bearings
- cCSAus listed
- 720 watts, 9 amps
- 17.5 pounds
- 46 GPM at 5 foot

6 CIA Little Giant Pump

Item **PUM3000** Each \$160.00

8 CIA Little Giant Wet Wall Pump

- 4/10 hp shaded pole motor with overload protection
- Designed for continuous duty
- Epoxy coated cast iron housing
- Carbon/ceramic shaft seal
- Upper and lower sintered sleeve bearings
- cCSAus listed
- 1-1/2 inch FPT discharge
- 830 watts, 10 amps
- 9.5 x 8.5 x 6 inches LWH
- 18.75 pounds
- 54 GPM at 5 foot

8 CIA Little Giant Wet Wall Pump

Item **PUM3100** Each \$251.30

1900 GPH1/8 HP

Little Giant Submersible Pump

This pump is extremely versatile, able to be used vertically and horizontally.

- Unique dual-discharge design allows for operation of two water features simultaneously
- Powerful direct-drive pump produces greater starting torque and flow pressure than comparable magnetic drive submersible pumps
- Corrosion-resistant body designed for non-potable submersible use
- Includes two 1-1/4" MNPT x 1" barbed elbow adaptor and a 1-1/4" MNPT discharge cap
- Maximum pumping height of 20'
- 1-1/4" FNPT discharge and 1-1/4" MNPT discharge cap
- Barbed adaptor accepts 1" tubing
- 3 Year Warranty
- 1/8 HP, 115V
- 9.6 x 6.35 x 8.1 LWH



Item **PUM3400** Each \$146.85

DOLPHIN PUMPS

Super Amp Master 7200. Freshwater Seal, Completely Redesigned 2 inch Wet End With A New Super Flow Turbine Style Impeller, Using A New Style Reverse Seal. One Year Factory Warranty Plus Free 10 Year Factory Service Guarantee. Motor Anti Vibration pad and Super Seal 2 inch Unions Included.



1/3 HP Dolphin Super AMP Master Marine 7200, 1725 RPM, 115v

Item **PUM7500** Each \$446.00

Dolphin Diamond Series Aqua Sea Premium Efficiency Pump. High Head Low Current Draw. Two Year Factory Warranty Plus Ten Year Free Extended Service Guarantee. Motor Pad and 1-1/2 inch New Super Seal Unions Included.

1 HP Dolphin Aqua Sea 9250 Pump, 115v

Item **PUM8300** Each \$522.00

1 HP Dolphin Aqua Sea 9500 Pump, 230v 50/60Hz

Item **PUM8400** Each \$522.00

Dolphin Super Aqua Sea. Premium Efficiency Compact 2 inch Side Discharge High Head Premium Efficiency Maximum Flow Freshwater Pump. Includes 2 inch Super Seal Unions And Pump Anti Vibration Pad. One Year Factory Warranty Plus Free 10 Year Factory Service Guarantee Included.

1 1/2 HP Dolphin Super Aqua Sea 12,500 Pump, 115v or 230v (must specify)

Item **PUM8700** Each \$580.00

CROPKING INJECTOR SYSTEM PUMP

- All stainless steel pump head
- 115 Volt
- 1-1/4 inch inlet, 1 inch Outlet
- Open impeller for solids handling, or enclosed impellers for higher heads and efficiencies

American Stainless pumps have a one-piece shell with an internal design that prevents air from being trapped in the pump case. These pumps do not have a volute design case which can put a radial load on the motor bearing. There is no diffuser to plug up or wear out.

3/4 HP SSPI Pump, 60 Hz, 115v, Single Phase

Item **PUM5001** Each \$680.00

1-1/2 HP SSPCI Pump, 50/60Hz, Single Phase

Item **PUM5002**

Each \$755.00



Feed Pump Adaptor, 1-1/4 x 1 inch Reducer

Note: To convert the pumping from PUM5000 to PUM5001

Item **PUM5010** Each \$9.95

LETTUCE CRISPER

Keeps lettuce fresh and prevents damage from handling in the grocery store. One piece, crystal clear crisper has hinged lid and has a cup in the bottom for the roots. It is also ideal for basil. Made from PETE material.



7-3/4 x 7-1/4 x 5-1/4 inches
Dimensions LxWxH

Lettuce Crisper

Item **CRI1000** Each \$0.26

Lettuce Crisper, Case of 420

Item **CRI 1000** Each \$84.00

LETTUCE CRISPER

Rounded Top

Just like our other crisper, but this one is more rounded, or dome like. These new crispers are less bulky and take up less space per box, so there is a saving on shipping. It is also a little less expensive than our standard crisper.



Lettuce Crisper Rounded Top

Item **CRI1500** Each \$ 0.21

Lettuce Crisper Rounded Top, Case of 840

Item **CRI1500** Each \$142.80

Lettuce Crisper Box

Minimum of 240
16 x 24 x 12 inches.

Each box holds 12 lettuce crispers.

Item **BOX5000** 1-1199 Each \$2.45

Item **BOX5000** 1200-2499 Each \$2.85

Item **BOX5000** 2500-4999 Each \$2.75

Item **BOX5000** 5000+ Each \$2.60

HERB CRISPER

Keeps herbs fresh and prevents damage from consumer handling. One-piece clear clam shell makes for easy packing. Designed to hold one-half to one ounces of herbs; has hole for hanging. 8-1/8 x 4-1/4 x 1-3/8 inches



Herb Crisper

Item **CRI3000-E** Each \$0.30

Herb Crisper, Case of 1000

Item **CRI3000** Each \$130.00

LETTUCE BOX

Our one piece lettuce box is designed for quick and easy fold-together assembly. It is pre-printed with green lettering on a white background and will hold 20 heads of hydroponic bibb lettuce. Use with our white lettuce box liners. Quantities of 5,000 or more could be custom printed.

Lettuce Bulk Pack Box, Minimum of 1,200 - Size: 24 x 16 x 8-1/4 inches LWH

Item **BOX3000** 1200 Each \$3.40

Item **BOX3000** 1201-2399 Each \$3.25

Item **BOX3000** 2400+ Each \$3.15



White Lettuce Box Liner 1 MIL

Roll of 500
One sheet of liner is 54" x 45"

Item **LIN0500** Each \$123.65

10+ \$121.00

LEAF LETTUCE BAG

Leaf lettuce V Shaped vented bags. 4,000 to a case. Great for basil, too. Openings at top and bottom. 12 3/4" long 12 1/2" at the top and 4" at the bottom

Item **BAG4000** Case \$278.00

TOMATO PACKAGING

It is low cost, and very simple to use. It is a brown, one piece box with red and black printing, and the top is open allowing easy viewing of the tomatoes. End tabs allow easy stacking.

10 Pound Open Tomato Box

Skid of 500
Size: 19-1/4 x 13 x 3-1/2 inch LWH

* Minimum order of 1000

Item **BOX1011** 1-999 Each \$3.00

Item **BOX1011** 1000-2499 Each \$1.70

Item **BOX1011** 2500-4999 Each \$1.55

Item **BOX1011** 5000+ Each \$1.40

15 Pound Open Tomato Box

Skid of 520
Size: 23 x 15 x 3.5 inch LWH

Item **BOX3001** 1040-2499 Each \$2.10

Item **BOX3001** 2500+ Each \$1.95



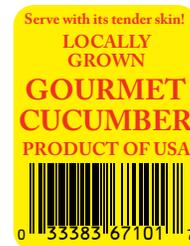
CUCUMBER LABELS

Identify Locally Grown Gourmet Cucumber and includes bar code.

Cucumber Label, Roll of 2,000

Item **LAB2000** 1-19 Each \$26.95

Item **LAB2000** 20+ Each \$23.00



Custom Labels Available

Approved art needed.

Call for custom labels at 330-302-4203.

50 roll minimum on Tomato Labels

25 roll minimum on Crisper Labels

BLUELAB COMBO METER

A conductivity, pH and temperature meter all in one. It comes with a pH probe and conductivity/temperature probe (reads in both EC and PPM), which are simply placed into the solution and the selected reading is displayed on screen. As the Blue Lab Combo Meter is portable and does not require a power supply to operate, it can be used anytime and anywhere to help you manage your crops daily nutrient requirements.



- Bluelab Combo Meter**
Item PHM3000 Each \$199.00
- Replacement Probe**
Item PHM3001 Each \$65.00

BLUELAB GUARDIAN MONITOR

The Bluelab Guardian Monitor is not only a constant indicator of the desired levels of pH, conductivity and temperature of your nutrient solution, it also data logs these critical parameters to your computer for you. It does not stop there. You can access the data via the cloud from a remote mobile device or computer to check for extreme variances to ensure these critical parameters are hitting the mark for crop success. Just one Bluelab Connect Stick is required to receive wireless data from one or more Guardian Monitor connects. For remote or cloud access, the computer you are already data logging to will need permanent internet access.



- Bluelab Guardian Monitor**
Item PHM3002 Each \$255.00

BLUELAB GUARDIAN MONITOR CONNECT

The Bluelab Guardian Monitor Connect is not only a constant indicator of the desired levels of PH, conductivity and temperature of your nutrient solution, it also data logs these critical parameters to your computer for you.

- Guardian Monitor Connect**
Item PHM3005 Each \$375.00
- Connect Stick**
Item PHM3006 Each \$120.00
- Connect Range Extender**
Item PHM3007 Each \$125.00

REFRACTOMETER

Check sugar content of ripening fruit.



Easily calibrated, the refractometer measures from 0-32% Brix, with +0.5% accuracy, with or without automatic temperature compensation. Simply place one or two drops of fruit or vegetable juice on the scale and read the results in Brix percentages through the shaded area on the eyepiece. Includes case and instructions.

- Refractometer**
Item REF1000 Each \$54.00

**See page 49 for PH Control solutions*

TDS CONDUCTIVITY STANDARD



Use conductivity standard for verifying, or adjusting the readings on your conductivity meter. Standard expected reading 2.77 milli mhos/cm.

- TDS Standard, 1/2 Pint**
Item TDS1001 Each \$7.50
- TDS Standard, 1 Pint**
Item TDS1002 Each \$10.50

pH SUPPLIES

pH Test Strips kit

Comes with a test vial, 100 test strips, and a color chart.

- Item PHK2000 Each \$19.00

pH Buffer Solution 4.0

- 1/2 Pint Item PHB1000 Each \$7.50
- 1 Pint Item PHB1001 Each \$10.50

pH Buffer Solution 7.0

- 1/2 Pint Item PHB1003 Each \$7.50
- 1 Pint Item PHB1004 Each \$10.50

CLEANING KITS

Bluelab pH Cleaning Kit

Includes detailed instructions, decanter vessels, probe cleaner, cleaning tool, toothbrush, and calibration solutions



- Item PHM3100 Each \$19.95

Bluelab EC Cleaning Kit

Includes detailed instructions, decanter vessel, probe cleaner, probe chamois, and conductivity standard solution.



- Item PHM3200 Each \$9.95

KCI Storage Solution 100ml

We know it is extremely important to care for and store pH probes correctly. pH probes are sensitive glass instruments which age through normal use. The life and performance of pH probes is reduced heavily when they are used or stored dry. Bluelab pH Probe KCI Storage Solution is made specifically for use with Bluelab pH products. It is designed to increase response time and maximize the life of Bluelab pH pens and pH probes. For best results, use the KCI solution to store the pH pen/probe after use and hydrate monthly. Instructions are on the bottle label. Bluelab pH Probe KCI Storage Solution is manufactured specifically for Bluelab products are NIST certified and are made to a traceable standard to ensure your Bluelab products last longer and maintain accuracy.



- Item PHM3400 Each \$9.95

**** Ships as HAZARDOUS:
Add \$31.36 per carton**

iGrow 1400™

GREENHOUSE ENVIRONMENTAL MANAGER

The compact, highly versatile iGrow 1400™ represents state-of-the-art greenhouse environmental automation. Using the iGrow1400 you can easily integrate and control virtually every piece of equipment in your greenhouse, giving you powerful control of the heating, cooling, shading, venting, humidity and irrigation. All of these functions are integrated into one easy-to-use system.



The iGrow 1400 features 12 relay outputs, 2 alarm outputs, 8 sensor inputs, and manual override switches to control all your greenhouse equipment. It has intelligent heating/cooling, humidity, CO2, shading, vent, bottom heat, HID lighting and irrigation control to create the perfect environment for your plants. Advanced features like 12 stages of heating/cooling, stage overrides, 4 setpoints that can be adjusted, flexible dehumidification control, heat boost, up to 30 day historical data storing, and smart irrigation make this the perfect controller for all your greenhouse needs.

The iGrow1400™ comes in a watertight NEMA4 clear lockable enclosure to protect it from moisture and prevent rust. The iGrow1400™ is also the first controller of its kind to have a context-specific "HELP" button on the front panel to give you helpful hints as you use the controller. The controller can be programmed or monitored via its own control panel, or through your computer (minimum Windows 2000 operating system) through the use of the optional iControl Software. A USB port makes it easy to connect your laptop to the system for programming, downloading historical information or troubleshooting. Should the need arise for analysis or troubleshooting, CropKing technical staff can access your iGrow1400 remotely once you grant access to the system.

- Enclosure is a white, NEMA 4, watertight case with clear lockable cover (9 x 9 x 4inch)
- 12 relay outputs, all user-definable
- Mechanical interlock jumpers for adjacent channels
- Bus jumpers for wet contact outputs (e.g. 24VAC)
- Backlit graphical display
- Keypad for local programming
- 2 alarm outputs – dry contacts – compatible with Sensaphone telephone autodialer
- 8 analog sensor inputs
- 4 serial communication channels
- 11 digital inputs
- Manual override switches and green LED status lights for each relay output
- Red LED alarm status lights
- Powered by 12 volt DC external power supply

iGrow 1400 with Digital Temperature/Humidity Sensor

Item **IGROW1400THS** Each \$2250.00

iGrow 1400 Environmental Controller Only

Item **IGROW1400** Each \$2050.00

iGrow Environmental Control Software

(Minimum Windows 2000 Operating System)

Item **IGROWICONTROL** Each \$1030.00

iGrow Weather Station

Item **IGROWWEASTA** Each \$1230.00

iGrow Solar Light Sensor

Item **IGROWSOLAR** Each \$245.00

iGrow Bottom Heat and Water Temperature Probe with 50 ft Cable

Item **IGROWTEMP** Each \$192.00

iGrow Digital Temperature and Humidity Sensor

Item **IGROWDTHS** Each \$298.95

iGrow 2-24 Cable, per foot

Item **IGROW224CABLE** Each \$0.80

iGrow 4-24 Cable, per foot

Item **IGROW424CABLE** Each \$0.90

CO₂ Transmitter

Item **CO2GMW25** Each \$280.00

CUSTOM PRE-WIRED ELECTRICAL PANEL

with pre-mounted environmental controls

CropKing offers a pre-wired electric panel for your greenhouse, built to your specifications to integrate the heating, cooling, or irrigation equipment.

Features:

- CropKing features the iGrow 1400 by Link 4 as the environmental controller.
- The iGrow is pre-mounted and programmed to best operate your particular greenhouse operation.
- 100 or 200 Amp Main breaker panel, Single or Three Phase
- Separate relay panel with terminal strip connections for all equipment (each connection is clearly marked)
- Wiring diagrams included for all equipment in the greenhouse
- Indoor rated electrical enclosures used as standard equipment

Options:

- NEMA/4 rated (watertight) enclosures
- Backup generator transfer switches
- Sensaphone alarms systems

Call for an equipment specification worksheet for your greenhouse. This allows us to accurately quote the electrical panel for your operation.

Electrical Panel

Item **ELE2000**

PRICED PER QUOTE



Our Sales Staff Can Assist You...

We offer retrofit growing systems for any size greenhouse. Our sales associates will help you with your layout; our engineering staff will design a system for your current structure. Hydroponic seed varieties, nutrients and growing media are available.

Please call us at 330-302-4203 and ask to talk with one of our helpful sales people.

CERTIFIED HYGROMETER

The Abbeon Certified Hygrometer is a high quality instrument certified to be accurate within $\pm 2\%$. The dial indicates the complete range of 0 to 100% relative humidity and each instrument has been tested at three different positions of the dial at temperatures ranging from 32° to 230°F



Certified Hygrometer

Item **HYG1000** Each \$180.00

THERMOMETER

Indoor/Outdoor Minimum/Maximum Thermometer Features highest and lowest daily temperature records, large easy-to-read face, convenient push-button reset and temperature range from -40F to 120°F



Thermometer

Item **THE1002** Each \$22.00

Precision Thermometer

Item **THE1003** Each \$32.50



Dial Thermometer, 8 inch Stem

Item **THE1006** Each \$31.50



CO₂ GENERATOR

As you know, the shorter daylight hours of winter limit plant growth. To bring this growth to a maximum rate, it is essential to not only provide normal summertime CO₂ saturation rate but to "fertilize" the air with additional CO₂. Plants can use more CO₂ than normal atmosphere provides. And the more they use, the faster they grow. This generator provides the necessary CO₂ to speed up plant growth during the shorter daylight hours of winter. Plant quality is also improved as you add low cost



warmth to your greenhouse.

CO₂ Generator, Propane

Item **COG2000** Each \$845.00

CO₂ Generator, Natural Gas

Item **COG2001** Each \$845.00

SENSAPHONE 400

Monitoring System

Built-in Features

- Four user-selectable inputs, temperature or dry-contact
- Voice messages for each of the input alarms can be customized. User can record messages through unit's built-in microphone
- Microphone monitors high sound alarms and enables remote listen-in
- AC power failure sensing with variable recognition time
- Phone circuit monitors the integrity of the phone line. If phone line is cut or disconnected, an LED will flash and optionally the output relay can be tripped at the same time for a local indication of a problem
- Battery condition monitor; backup power via C cell batteries accessible from front of unit
- Standard power plug so that power cord can be easily removed and fed through enclosure openings
- Clock



Sensaphone, Model 400

Item **SEN0400** Each \$395.00

Temperature Sensor

Measures temperatures at a location away from the Sensaphone. Triggers alarm when temperature passes user-programmed high/low limits. Temperature range: -20° to +150°F. 25 foot cord.

Sensaphone Temperature Sensor, 2.8K

Weather Proof Temperature Probe
Item **SEN0005** Each \$33.75



Already have a greenhouse?

Looking to grow something different?

CropKing can help you retrofit your greenhouse and assist you in the production of many different crops. Our trained sales and technical staff can recommend the optimal and most cost-efficient solution for your situation.

ELECTRONIC TEMPERATURE CONTROL (ETC)

With its wide temperature setpoint range and selectable heating or cooling modes, the ETC can be used for a wide variety of applications. Closer control with electronic thermostat results in lower heating and cooling bills!

- Digital display allows simple and accurate setting of controls.
- Wide setpoint range (-30°F to 220°F) and differential adjustment (1°F to 30°F).
- Diagnostic program checks for hardware, software, or system problems and displays different error codes for easy troubleshooting.
- Keypad lockout switch prevents tampering.
- EPROM memory retains control settings during power outage.
- On power up, time delay protects equipment from simultaneous restarts.



1 Stage Electronic Temperature Controller, 120/208/240 Volt

Item **THE2003** Each \$80.05

2 Stage Electronic Temperature Controller, 120/208/240 Volt

Item **THE2004** Each \$142.50

POCKET SLING PSYCHROMETER



Simple to operate: saturate the wick of the wet bulb thermometer in clean water and whirl the sling psychrometer until the temperature stops dropping. Read the two thermometers.

Place wet bulb temperature over the dry bulb temperature scale on the slide rule. The arrow will then point directly to the accurate relative humidity. Comes complete with carrying case and slide rule. Range on thermometers is 20 to 110°F.

Pocket Sling Psychrometer

Item **SLI1000** Each \$77.50

FANS & SHUTTERS

Horizontal Air Flow Fan

A high efficiency air circular that effectively cools plants. Reduces condensation, controls insects and creates a uniform temperature throughout your building to reduce heating costs.



Features:

- Aluminum propeller designed to reduce ambient noise levels while maintaining maximum circulation requirements.
- OSHA approved guard
- Efficient variable speed motor
- Corrosion resistant white powder coated guard and hot dip galvanized bracket
- Fan and guards come completely assembled
- Prewired with 115V attached 6 foot cord and 3-prong plug
- Totally enclosed, maintenance free direct drive high efficiency motors have completely sealed ball bearings, UL/CUL certification and are covered by a full two year warranty

1/15 HP, 100W, 1400 RPM, 2000 CFM, 115 Volt

20 inch Horizontal Air Fan

Item **FAN1001** Each \$150.00

VERTICAL AIRFLOW FAN



Vertical air flow (VAF) fan, manufactured by Vostermans, the Multifan V-FloFan produces an air current that is forced outward and downward along the roof and walls of the greenhouse and then pulled upward through the crop. Potential improvements that we have observed in trials in our on-site research and demonstration greenhouses include reduced condensation on the inner plastic roof surface and the potential for reduced condensation on plant leaf surfaces. Such factors could have benefits in both plant production and plant health. We look forward to further trials and continued optimization of these air movement tools in our controlled environmental vegetable greenhouses.

Item **FAN2000** \$460.00

Vertical Airflow Fan Mounting Kit

Item **FAN2100** \$20.00

SHUTTERS, ALUMINUM

Motorized Shutter Kits include the aluminum shutter, motor (115 or 230V), and the mounting hardware.

Motorized Aluminum Shutter, Inner Dimension

16 x 16 inch	Item SHU1600	Each \$ 158.40
21 x 21 inch	Item SHU2100	Each \$ 169.60
27 x 27 inch	Item SHU2700	Each \$ 191.20
33 x 33 inch	Item SHU3300	Each \$ 216.00
39 x 39 inch	Item SHU3900	Each \$ 273.60
45 x 45 inch	Item SHU4500	Each \$ 309.60
51 x 51 inch	Item SHU5100	Each \$ 347.20
57 x 57 inch	Item SHU5700	Each \$ 400.00
60 x 36 inch	Item SHU6036	Each \$ 412.80

Shutter Motor, 115V, Coolair (motor only)

Item **SHU1000** Each \$ 82.00

Double Arm Linkage Kit for over 33 inch Shutters, Motor not Included.

Item **SHU1100** Each \$ 44.00

SHUTTER MOTOR KIT

Kit for 16-33 inch shutters. Over 33 inch shutters requires double-arm.

Shutter Motor Kit, 115V, Coolair (includes motor, arm, chain and spring)

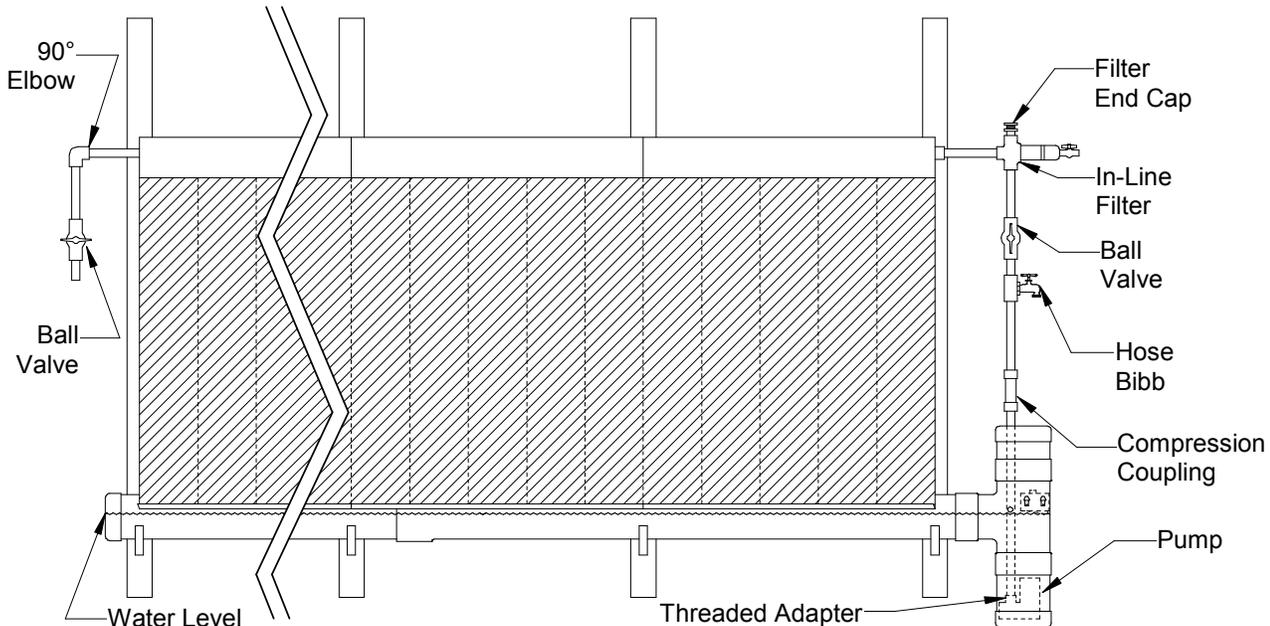
Item **SHU1001** Each \$ 118.00

NEED TO COOL YOUR SMALL GREENHOUSE?

Cooling Package \$2395.00

- Cools Approximately 450 Square Foot Greenhouse
- 30 inch Exhaust Fan, 1/3 HP, 230V, 2 speed, Single Phase motor
- (2) 60 x 36 inch Motorized Inlet Shutters
- 3' x 10' x 4" Evaporative Cooling Package with Sump Pump
- Additional Sizes Available

PVC EVAPORATIVE COOLING SYSTEM



COOLAIR FAN PACKAGES

Package includes: Shutter, Slope Wall Housing and Fan

Basic Components

- Fan packages are single speed, two speed also available.
- Frames are fabricated from heavy gauge steel with all welded construction offering the rigidity and strength for years of quiet trouble-free operation. A wide flared orifice is recessed and welded into the frame.
- Coolair's new super tough paint finish is a baked powder polyester coating for years of long wear and low upkeep.
- Box wall housings are available at a lower cost. Aluminum housings are available at a higher cost.
- Fans and cooling equipment are shipped direct from the factory in Jacksonville, Florida, and prices are FOB factory. Indicate voltage needed.
- Fan Package includes Shutter, Slope Wall Housing and Fan.

24 inch Fan Package:

1/4 HP	Item FAN2414	Each \$610.40
1/3 HP	Item FAN2413	Each \$610.40
1/2 HP	Item FAN2412	Each \$630.40
3/4 HP	Item FAN2434	Each \$664.80

30 inch Fan Package:

1/4 HP	Item FAN3014	Each \$676.00
1/3 HP	Item FAN3013	Each \$676.00
1/2 HP	Item FAN3012	Each \$696.00
3/4 HP	Item FAN3034	Each \$722.40

36 inch Fan Package:

1/3 HP	Item FAN3613	Each \$772.00
1/2 HP	Item FAN3612	Each \$792.00
3/4 HP	Item FAN3634	Each \$818.40
1 HP	Item FAN3610	Each \$833.60

42 inch Fan Package:

1/2 HP	Item FAN4212	Each \$920.00
3/4 HP	Item FAN4234	Each \$946.40
1 HP	Item FAN4210	Each \$961.60

Replacement Parts for 42 inch Fan:

Fan Blade Pair	Item FAN4200	Each \$54.00
Fan Shaft Assembly	Item FAN4201	Each \$54.00
Fan Disc Assembly	Item FAN4202	Each \$117.00

48 inch Fan Package:

1/2 HP	Item FAN4812	Each \$1025.60
3/4 HP	Item FAN4834	Each \$1052.00
1 HP	Item FAN4810	Each \$1067.20

Replacement Parts for 48 inch:

Fan Blade Pair	Item FAN4800	Each \$48.00
Fan Shaft Assembly	Item FAN4801	Each \$62.00
Fan Disc Assembly	Item FAN4802	Each \$158.00

54 inch Fan Package:

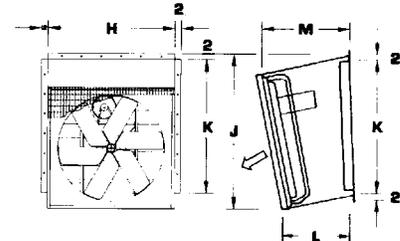
1 HP	Item FAN5410	Each \$1241.60
1-1/2 HP	Item FAN5415	Each \$1301.60

Slope wall housing, motor mounted shutter and wall housing guard are shipped in separate cartons. Please inspect cartons for damage!

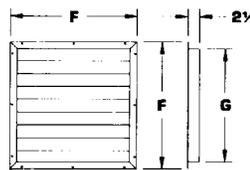
GSWH (Slope) Wall Housing Dimensions

MODEL	H	J	K	L	M	SHIP WT.
GSWH24	32-3/8	38-1/16	32-3/8	22-15/16	27-15/16	52
GSWH30	38-3/8	43-15/16	38-1/2	22	27-15/16	67
GSWH36	44-3/8	50	44-9/16	21-13/16	28-11/16	82
GSWH42	50-3/8	55-7/8	50-5/8	20-1/2	28-5/16	104
GSWH48	56-3/8	62-1/16	56-11/16	21-1/16	29-7/8	122
GSWH54	62-3/8	68-3/16	62-3/4	21-1/2	31-3/16	132

Rough Opening- Add 1/2" to H for width and:
 • for 2" wall add 3/4" to K for height
 • for 4" wall add 1-1/4" to K for height
 • for 6" wall add 1-1/2" to K for height



LRW Shutter Dimensions

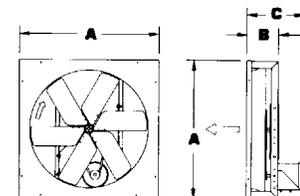


Shutter Model	F O.D.	G* I.D.	Ship Wt.
LRW27	30-1/4	27	12
LRW33	36-1/4	33	14
LRW39	42-1/4	39	17
LRW45	48-1/4	45	20
LRW51	54-1/4	51	24
LRW57	60-1/4	57	30

*For net opening add 1/2" to I.D.

NBF Fan Dimensions

Fan Model	Dia.	Blade A	B	C
NBF24	24	32	10-5/16	17-7/8
NBF30	30	38	10-5/16	17-7/8
NBF36	36	44	10-1/16	17-3/4
NBF42	42	50	9-7/16	17-1/8
NBF48	48	56	10-1/8	17-7/8
NBF54	54	62	10-5/8	18-1/4



PERFORMANCE DATA - Type NBF Fan (all specifications subject to change without notice)

Fan Model	Blade Dia.	Motor H.P.	Fan RPM	Approx. Ship Wt.	0" S.P.		.05" S.P.		.10" S.P.		.125" S.P.	
					CFM	BHP*	CFM	BHP*	CFM	BHP*	CFM	BHP*
FAN2414	24"	1/4	627	70	5400	0.235	5100	0.248	4755	0.258	4530	0.267
FAN2413		1/3	706	73	6080	0.336	5800	0.350	5490	0.364	5370	0.368
FAN2412		1/2	815	79	7020	0.517	6760	0.534	6550	0.549	6375	0.559
FAN2434		3/4	972	93	8370	0.877	8140	0.897	7970	0.915	7885	0.925
FAN3014	30"	1/4	486	77	7620	0.268	7100	0.282	6480	0.295	6040	0.301
FAN3013		1/3	533	70	8360	0.353	7890	0.369	7360	0.383	7040	0.390
FAN3012		1/2	627	86	9830	0.575	9430	0.594	9020	0.611	8790	0.619
FAN3034		3/4	706	106	11070	0.821	10715	0.842	10350	0.862	10160	0.872
FAN3613	36"	1/3	419	100	10600	0.364	9840	0.387	8890	0.399	8225	0.405
FAN3612		1/2	474	110	12000	0.527	11325	0.554	10580	0.572	10120	0.578
FAN3634		3/4	541	118	13700	0.783	13105	0.815	12495	0.839	12155	0.893
FAN3610		1	609	120	15415	1.117	14895	1.153	14360	1.184	14080	1.196
FAN4212	42"	1/2	365	122	14025	0.496	13070	0.523	11925	0.546	11040	0.560
FAN4234		3/4	433	128	16635	0.827	15865	0.860	14930	0.888	14435	0.903
FAN4210		1	474	130	18210	1.085	17515	1.121	16685	1.157	16265	1.168
FAN4812		1/2	303	146	17665	0.577	16250	0.589	14300	0.593	12635	0.589
FAN4834	48"	3/4	350	152	20410	0.889	19240	0.904	17650	0.910	16875	0.914
FAN4810		1	373	154	21750	1.076	20665	1.092	19220	1.104	18500	1.103
FAN5410	54"	1	350	280	24520	0.986	23060	1.027	21360	1.058	20250	1.079
FAN5415		1-1/2	414	296	29000	1.631	27780	1.681	26475	1.725	25750	1.741

Note: Motors have been tested at maximum BHP conditions and operate within standard allowable NEMA temperature, limits, and carry full warranty. Performance shown is for Type NBF fans without ducts.

*BHP does not include drive losses. Bearing losses are included.

GLACIER-COR™ SYSTEM

Evaporative Cooling Pads are 4 or 6 inch thick, 12 inch wide with height increments every 12 inch from 24 to 96 inch. The Evap Pads are positioned adjacent to each other to form a continuous pad of the required height and length. The Evap Pads are made of specially formulated cellulose paper, impregnated with insoluble anti-rot salts, stiffening saturants and wetting agents. 4 inch Evaporative Pads up to 48 inch tall and 6 inch Evaporative Pads up to 72 inch tall are self-supporting, and therefore they do not require wire baskets or other supporting materials. The pads are held in place by component parts of the system. Tall pad supports are required on 4 inch pad systems over 48 inch tall and 6 inch pad systems over 72 inch tall.

- Completely self-contained
- Sump included
- Energy Efficient cooling
- Custom designs available

REPLACEMENT COOLING PAD

- 4" thick x 1' wide x 3' tall**
Item **GCP3600** Each \$14.40
- 6" thick x 1' wide x 3' tall**
Item **GCP3601** Each \$21.60
- 4" thick x 1' wide x 4' tall**
Item **GCP4800** Each \$19.35
- 6" thick x 1' wide x 4' tall**
Item **GCP4801** Each \$28.80
- 4" thick x 1' wide x 5' tall**
Item **GCP6000** Each \$24.40
- 6" thick x 1' wide x 5' tall**
Item **GCP6001** Each \$36.00

Cool-N-Clean

For water pipes, cool cell pads and hard environmental surfaces.

1. Wet Pad thoroughly using a house washer or water hose. Do NOT use too high of pressure or it will harm the pad
2. Combine (2) gallons of Cool-N-Klean with (10) gallons of water into a backpack/ pump up sprayer
3. Spray mixture thoroughly onto entire length of pad and let sit for 30 minutes
4. Then spray with clear water from top to bottom, removing all mineral deposits and algae
5. To control the growth of algae, spray pads once a week with Cool-N-Clean at a rate of 1 ounce to 20 gallons of water during periods of use.

- 1 Gallon
Item **GCP1000** Each \$14.95

VENT DOOR

Endwall Vent Door Package with extruded aluminum frame, 8mm polycarbonate covering, heavy duty gear motor with internal limit switches, and related hardware for mounting onto an endwall. The vent door assembly is attached to the structure itself. The gear motor includes an exterior wiring box with manual switches and connections for an iGrow or other computer systems. The door covers inside openings of 4 foot high to any length up to 175 foot. ****Please call for a price quote.**

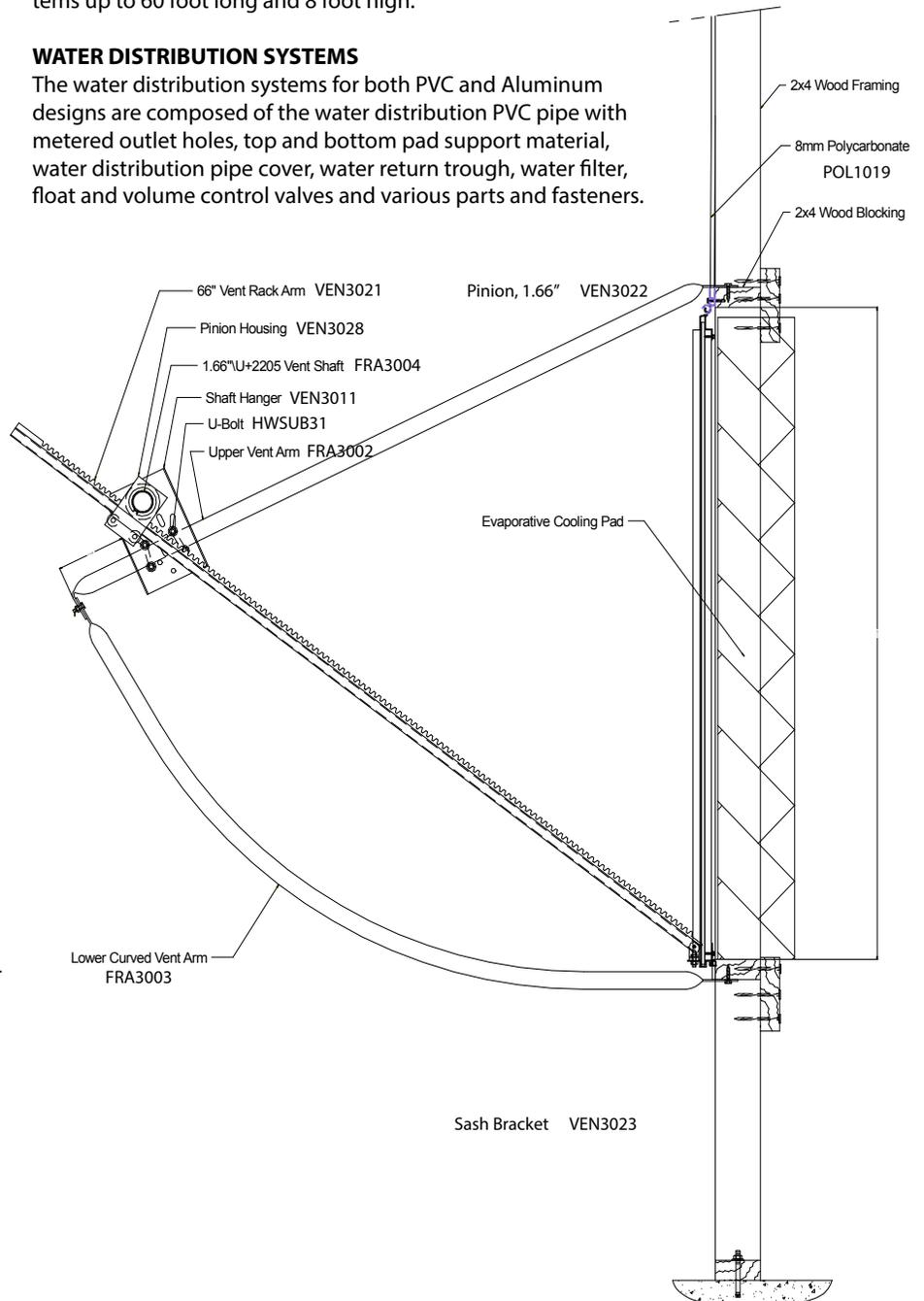
- CropKing Vent Door Motor**
Item **VEN4000** Each \$1635.10
- Mounting Kit**
Item **VEN4001** Each \$49.50

THE PUMP AND SUMP

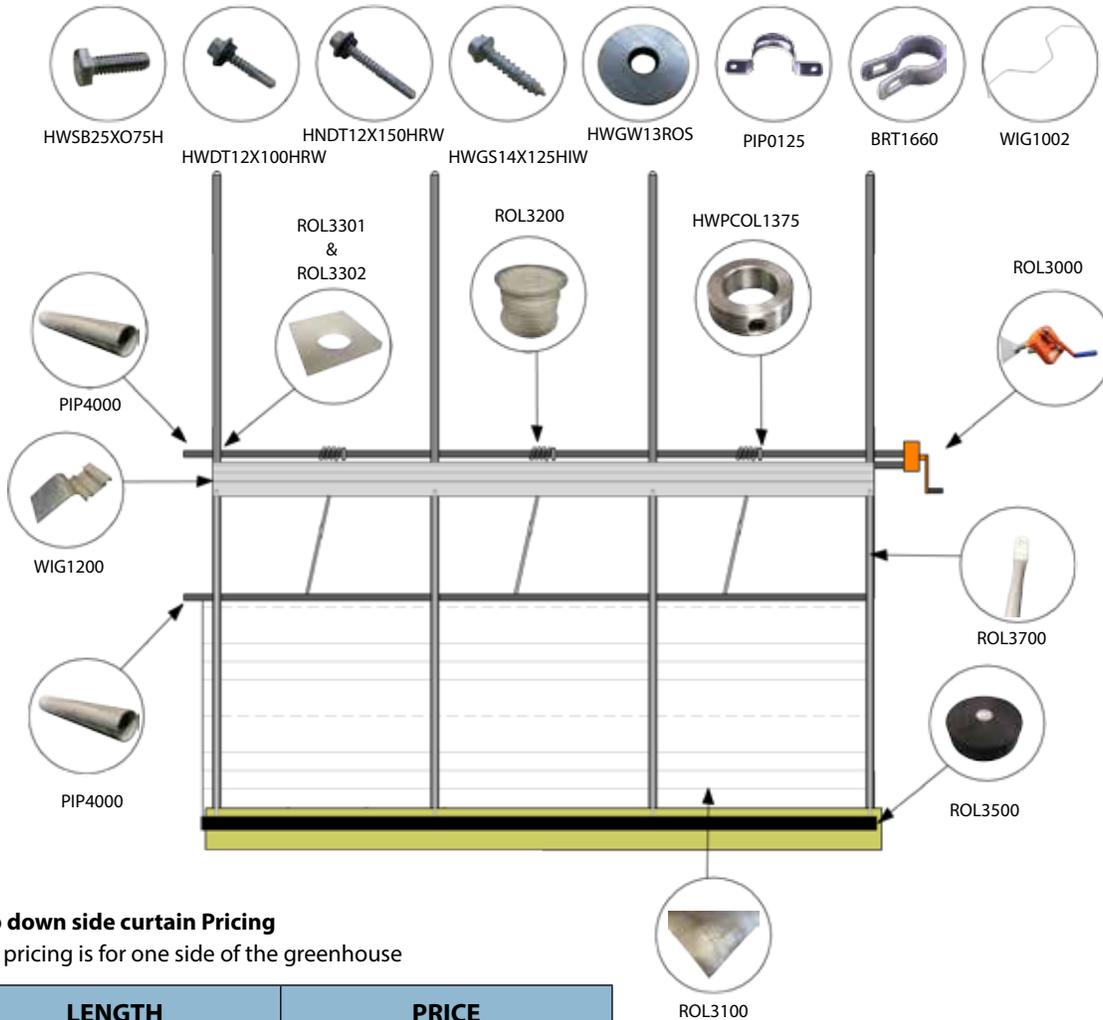
The pumps are sized for the system to supply at least 1/2 gallon of water per minute per linear foot of pad system. The integral PVC sump and trough hold an adequate water supply for systems up to 60 foot long and 8 foot high.

WATER DISTRIBUTION SYSTEMS

The water distribution systems for both PVC and Aluminum designs are composed of the water distribution PVC pipe with metered outlet holes, top and bottom pad support material, water distribution pipe cover, water return trough, water filter, float and volume control valves and various parts and fasteners.



DROP-DOWN SIDEWALL CURTAIN PACKAGE FOR HIGH TUNNEL



Drop down side curtain Pricing

*This pricing is for one side of the greenhouse

LENGTH	PRICE
48'	\$1120.00
72'	\$1485.00
96'	\$1840.00

Call for custom quote!

ROLL-UP SIDEWALL CURTAIN PACKAGE FOR HOOP HOUSE

Side-Clasp Roll-Bar System Packages use 2 inch Side-Clasp Roll-Bar with built in wirelock channel

- One-Piece Roll-Bar with integrated WireLock Channel
- Double WireLock to attach your roof covering to the top clasp and the roll-up curtain to the lower clasp.
- Wind Rope System that holds curtain to the structure, and materials for creating end panels. Curtain laps 4 foot on each end.
- Packages include End Panel, WireLock and installation aids.
- Film for curtain sold separately.
- 4 foot 6 inch tall opening.

Call for additional options!

Package Option 1

Includes options above, plus the unique Roll-Lock system to securely lock down curtain and provide an airtight seal.

* Curtains must be ordered in 4 foot increments.

Item ROL2000

20 - 44 Foot	\$17.25 per foot
48 - 92 Foot	\$15.70 per foot
96 - 240 Foot	\$14.35 per foot

Package Option 2

Cost effective roll-up curtain package. Includes options above, without the Roll-Lock system.

* Curtains must be ordered in 4 foot increments.

Item ROL2100

20 - 44 Foot	\$11.50 per foot
48 - 92 Foot	\$10.50 per foot
96 - 240 Foot	\$ 9.50 per foot

HEATERS

MODEL PDP, POWER VENTED



- Power vented (less heat loss in off cycles)
- Flue can be run horizontally
- Helps overcome negative pressure in house
- Can use smaller diameter single wall flue
- No blocked vent switch
- Higher seasonal efficiency
- Spark ignition (saves energy)
- Requires Single Heater Hanger Kit

Features:

- 80% thermal efficiency, maximizing seasonal efficiency through the use of a collector box and the power exhauster.
- A power exhaust that can be rotated 180°. The unit can be vented vertically or horizontally.
- A 100% shut-off, intermittent pilot-ignition system with continuous retry, at no extra charge. This ignition system allows for all PDP units to be field-converted to propane
- A safety pressure-switch to assure safe venting conditions.
- Designed to utilize the smallest-diameter vent pipe possible.
- PDP models are designed to operate against 0.5 inches of external static pressure.
- "Wing" screws so that the bottom pan can be dropped without a screwdriver or nut driver.
- A level hanging mechanism for easy field adjustments after adding accessories that may change the unit's center of gravity.

PROPANE:

150,000 BTU	Item HEA3014	Each \$1045.00
175,000 BTU	Item HEA3016	Each \$1045.00
200,000 BTU	Item HEA3018	Each \$1195.00
250,000 BTU	Item HEA3020	Each \$1495.00
300,000 BTU	Item HEA3022	Each \$1650.00

NATURAL GAS:

150,000 BTU	Item HEA3015	Each \$1045.00
175,000 BTU	Item HEA3017	Each \$1045.00
200,000 BTU	Item HEA3019	Each \$1195.00
250,000 BTU	Item HEA3021	Each \$1479500
300,000 BTU	Item HEA3023	Each \$1650.00

EFFINITY 93 HEATER (model PTC)



The most efficient gas-fired unit heater in North America.

All operating at 93% efficiency, the Effinity93 will dramatically lower energy costs through decreased gas/propane consumption. For those looking to feel even more green, each unit will reduce CO₂ output by roughly 13% versus comparable sized heaters.

Features:

- Uses 100% outside air for combustion.
- Sealed compartment protects combination gas control, ignition control, manifold and burner.
- Industry-proven, AL29-4C stainless steel secondary heat exchanger relieves fears of failure
- The PTC condensing unit heater line utilizes a bent tube heat exchanger and is ready for quick PVC pipe connections.
- 93% thermal efficiency, maximizing seasonal efficiency through the use of a collector box and the power exhauster
- Horizontal or vertical concentric vent kits are available.
- 20 gauge aluminized steel cabinet
- Aluminized steel heat exchanger (409 stainless steel optional)
- Adjustable air-deflector blades
- Fans engineered for quiet operation
- Totally enclosed fan/blower motors
- Permanently-lubricated motor for trouble-free dependability.
- High temperature limit protection
- Gas control step down transformer with 24V gas controls
- Direct spark ignition with continuous retry control system
- Requires a Double Heater Hanger Kit

PROPANE:

135,000 BTU	Item HEA4000	Each \$2525.00
156,000 BTU	Item HEA4002	Each \$2720.00
180,000 BTU	Item HEA4004	Each \$2800.00
215,000 BTU	Item HEA4006	Each \$3200.00
260,000 BTU	Item HEA4008	Each \$3350.00

NATURAL GAS:

135,000 BTU	Item HEA4001	Each \$2525.00
156,000 BTU	Item HEA4003	Each \$2720.00
180,000 BTU	Item HEA4005	Each \$2800.00
215,000 BTU	Item HEA4007	Each \$3200.00
260,000 BTU	Item HEA4009	Each \$3350.00

HOT DAWG: MODINE GAS-FIRED LOW PROFILE UNIT HEATER



Model HD – Modine's gas-fired, low profile unit heaters are available in 115V/60Hz/1Ø power, come standard for use on natural gas, and are equipped with hot surface ignition. All Hot Dawg models come standard with a power exhauster and are certified for residential, commercial and industrial applications. They can be easily installed from a ceiling with two angle brackets supplied with the unit.

Features:

- 80% thermal efficiency
- Electrostatic polyester powder finish
- TEFC motors with vibration mounts
- Large easily accessible junction box
- Hinged bottom access for easy service
- Adjustable mounting brackets
- Requires a Double Heater Hanger Kit

For high altitudes, when ordering include:

- Type of gas: Propane or Natural
- BTU content (BTU/gallon of fuel used)
- Specific altitude in feet

PROPANE:

30,000 BTU	Item HOTHD30B	Each \$620.00
45,000 BTU	Item HOTHD45B	Each \$640.00
60,000 BTU	Item HOTHD60B	Each \$735.00
75,000 BTU	Item HOTHD75B	Each \$755.00
100,000 BTU	Item HOTHD100B	Each \$875.00
125,000 BTU	Item HOTHD125B	Each \$945.00

NATURAL GAS:

30,000 BTU	Item HOTHD30A	Each \$620.00
45,000 BTU	Item HOTHD45A	Each \$640.00
60,000 BTU	Item HOTHD60A	Each \$735.00
75,000 BTU	Item HOTHD75A	Each \$755.00
100,000 BTU	Item HOTHD100A	Each \$875.00
125,000 BTU	Item HOTHD125A	Each \$945.00

FREE SHIPPING ON ALL HEATERS!
*Excludes Hot Dawg Heaters

HEATER HANGER KITS

Single Heater Hanger Kit

Item **HEA1000**

Each \$54.50

Double Heater Hanger Kit

Item **HEA1002**

Each \$99.95



Heater Hanger Rod, 18 x 3/8 inch

Item **HWALL37x18**

Each \$3.50



Convection Tube Hangers, PVC, 10 pack

Item **TUB1000**

Each \$16.00



Woven Tube Hangers, 12 pack

Item **TUB2000**

Each \$10.20

COOLAIR POWER TUBE FANS

Pricing includes Heat Kit

Power Tube Fans (also called a Jet Fan) are an important part of a controlled environment greenhouse. These fans are usually placed in the gable of the greenhouse and provide the distribution of outside air or the warm air from the heaters down the length of the greenhouse.

The system includes the fan, the motorized shutter and the heat kit. The Power Tube Fans are available in 18", 24", and 30". The 24" and 30" are Convection Tube and tube hangers are sold separately, by needed length. Guards are optional but recommended.

Standard Features:

- Air straightener vanes
- Self-sealed bearings for continuous trouble free performance
- Heavy gauge steel construction
- Six steel die formed propeller blades
- The 24" and 30" are belt driven models have two sealed lifetime lubricated shaft bearings

Single Phase (3 phase is Optional):

18 inch Jet Power Tube Fan

1/3 HP, Direct Drive, 1625 CFM

Item **JET1813**

Each \$704.00

24 inch Jet Power Tube Fan

1/3 HP, Direct Drive, 4850 CFM

Item **JET2413**

Each \$792.00

30 inch Jet Power Tube Fan

1/2 HP, Belt Drive, 7550 CFM

Item **JET3012**

Each \$879.20

30 inch Jet Power Tube Fan

1 HP, Belt Drive, 10450 CFM

Item **JET3010**

Each \$920.80



CONVECTION TUBE

Our convection tube is made of an upgraded 4 Mil strong virgin polyethylene with high clarity and a special blend of additives. It is designed to last one season, when installed inside a greenhouse. Tubes are staggered punched for improved air circulation and distribution. 50' minimum length.

12 inch Punched, per foot

Item **CON0012**

Each \$0.65

12 inch Unpunched, per foot

Item **CON0013**

Each \$0.60

18 inch Punched, per foot

Item **CON0018**

Each \$0.75

18 inch Unpunched, per foot

Item **CON0019**

Each \$0.70

20 inch Punched, per foot

Item **CON0020**

Each \$0.85

20 inch Unpunched, per foot

Item **CON0021**

Each \$0.80

24 inch Staggered Punched, per foot

Item **CON0024**

Each \$1.00

per roll

Item **CON2400**

\$124.50

24 inch Unpunched, per foot

Item **CON0025**

Each \$0.95

30 inch Staggered Punched, per foot

Item **CON0030**

Each \$1.15

per roll

Item **CON3000**

\$146.25

30 inch Unpunched, per foot

Item **CON0031**

Each \$1.00

*24 and 30 inch in stock @ 100 and 130 foot

TRY BEFORE YOU BUY WITH ONE OF OUR GROWER'S WORKSHOPS

Whether you're looking for a 2 day introduction, or a 5 day intensive, we have something to fit your needs!

Turn to page 60 for more details.



FOLLOW US ON SOCIAL MEDIA



BiOWiSH™-Hydroponic

BiOWiSH™-Hydroponic is an organic enzymatic additive that stimulates microbial activity in hydroponic systems, helping to increase micronutrient uptake in plants and improve plant vigor. Developed for the protected cropping and hydroponics industries, BiOWiSH™-Hydroponic also prevents sludge build-up and problematic scaling in dripper lines, micro-tubes and Nutrient Film Technique (NFT) gully floors.



BiOWiSH™ helps increase micronutrient uptake in plants and improves plant vigor

BiOWiSH™ technology creates a composite biocatalyst that enhances biochemical reactions more quickly than available alternatives, and performs effectively in a wide range of environmental conditions. Derived from a proprietary manufacturing process, the robust blend of biocatalysts enhances the beneficial role of microbial activity to break down organic matter and increase nutrient availability. Use 2 teaspoons of biowish for every 250 gallons of water per day.

BiOWiSH™-Hydroponic, 100 grams

Item **BIO0164**

Each \$13.43

BiOWiSH™-Hydroponic, 1,000 grams (2.2 lbs)

Item **BIO0159**

Each \$108.88

Nylon Mesh Bag, 50 micron

Item **STR4001**

Each \$8.50

KEY BENEFITS

- Improves yield
- Improves plant vigor
- Reduces growth time, more harvests per year
- Improves nutrient availability
- Improves consistency across harvest
- Improves root development
- Improves budding
- Promotes longevity of flowering
- Increase storage life of produce
- Stimulates microbial activity
- Certified for organic food production by WSDA

Leafy Greens

GUARANTEED ANALYSIS

Total Nitrogen (N).....	4.30%
Available Phosphoric Acid (P ₂ O ₅).....	9.30%
Soluble Potash (K ₂ O).....	35.00%
Magnesium (Mg).....	3.90%

TRACE ELEMENTS

Boron (B).....	200 mg/kg
Copper (Cu).....	105 mg/kg
Iron (Fe).....	2100 mg/kg
Manganese (Mn).....	190 mg/kg
Molybdenum (Mo).....	42 mg/kg
Zinc (Zn).....	210 mg/kg

Vine Crop

GUARANTEED ANALYSIS

Total Nitrogen (N).....	4.40%
Available Phosphoric Acid (P ₂ O ₅).....	13.00%
Soluble Potash (K ₂ O).....	34.00%
Magnesium (Mg).....	3.70%

TRACE ELEMENTS

Boron (B).....	275 mg/kg
Copper (Cu).....	95 mg/kg
Iron (Fe).....	1000 mg/kg
Manganese (Mn).....	800 mg/kg
Molybdenum (Mo).....	40 mg/kg
Zinc (Zn).....	270 mg/kg

HYDRO-GRO Hydroponic Fertilizer

Hydro-Gro fertilizer is the premier hydroponic fertilizer! It can be shipped easily by UPS or by motor freight.

Hydro-Gro Vine Crop, 50 Pounds

Item FER1000	Each \$126.00
Item FER1000	2-4 \$117.00
Item FER1000	5-9 \$104.00
Item FER1000	10-19 \$99.00
Item FER1000	20-39 \$94.50
Item FER1000	40+ \$91.00

Hydro-Gro Vine Crop, 5 Pounds

Item FER3022	Each \$19.00
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Hydro-Gro Vine Crop, 1 Pound

Item FER3021	Each \$9.50
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Hydro-Gro Leafy Greens, 50 Pounds

Item FER1500	Each \$126.00
Item FER1500	2-4 \$117.00
Item FER1500	5-9 \$104.00
Item FER1500	10-19 \$99.00
Item FER1500	20-39 \$94.50
Item FER1500	40+ \$91.00

Hydro-Gro Leafy Greens, 5 Pounds

Item FER3020	Each \$19.00
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Hydro-Gro Leafy Greens, 1 Pound

Item FER3019	Each \$9.50
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Calcium Nitrate 50 Pounds

Item FER3014	Each \$29.95
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Calcium Nitrate, 5 Pounds

Item FER3025	Each \$7.00
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Calcium Nitrate 1 Pound

Item FER3024	Each \$2.60
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PRE-EMPT Organic Hydroponic Fertilizer 275 Gallon Tote

Benefits

- OMRI Listed complete organic nutrient package
- Derived from all natural plant extracts
- Improves Ion exchange between plants and water
- Elements are in Colloidal Form
- Includes a vitamin complex
- Can be used with supplemental fertilizers, insecticides and fungicides
- Around a 4 pH, which reduces amount of pH Down required
- Can completely replace conventional nutrient programs
- Can reduce overall plant cycle (seedling to harvest)
- Basil growers have experienced harvest 5 days earlier than with conventional program
- Growers have been able to go 90 days between reservoir changes (and possibly beyond)



MICRO NUTRIENTS

Copper Sulfate , 1 Pound	
Item FER3003	1-4 \$3.65
Item FER3003	5+ \$3.40
Iron Chelate , 5 Pounds	
Item FER3015	1-5 \$67.50
Item FER3015	6-9 \$61.50
Item FER3015	10+ \$58.50
Manganese Sulfate , 1 Pound	
Item FER3005	Each \$9.20
Micro Fine Sulfur , 1 Pound	
Item FER3042	Each \$4.45
Sodium Molybdate , 1/4 Pound	
Item FER3033	Each \$16.00
Sodium Molybdate , 1/2 Pound	
Item FER3033	Each \$30.00
Sodium Molybdate , 1 Pound	
Item FER3033	Each \$40.00
Solubor (Boron), 1 Pound	
Item FER3006	Each \$4.40
Zinc Sulfate , 1 Pound	
Item FER3016	Each \$3.90

CALCIUM NITRATE

For best results, use only Greenhouse Grade Calcium Nitrate in your hydroponic growing system. You will have less residue and sediment from mixing, and less plugging of your feedlines and drippers. 15.5-0-0

Greenhouse Grade Calcium Nitrate is a refined, prilled (uncoated) highly soluble material.

Calcium Nitrate , 50 Pounds	
Item FER3014	1-20 \$29.95
Item FER3014	21-40 \$28.05
Item FER3014	41+ \$27.60

GUARANTEED ANALYSIS

Total Nitrogen (N).....	15.5%
Nitrate Nitrogen (NO ₃).....	14.4%
Ammoniacal Nitrogen (NH ₄).....	1.1%
Calcium (Ca).....	19.0%

FERTILIZER COMPONENTS

Citric Acid , 1 Pound	
Item FER4000	Each \$4.95
Citric Acid , 50 Pounds	
Item FER4000	Each \$108.00
Magnesium Sulfate , 1 Pound	
Item FER2900	Each \$1.65
Magnesium Sulfate (Epson Salt), 50 Pounds	
Item FER2900	Each \$37.50
Mono- Potassium Phosphate , 1 Pound	
Item FER3009	Each \$3.50
Mono- Potassium Phosphate , 50 Pounds	
Item FER3009	Each \$82.50
Potassium Nitrate , 50 Pounds	
Item FER3012	1-20 \$69.00**
Item FER3012	21-40 \$65.55**
Item FER3012	41+ \$62.10**
Potassium Nitrate , 1 Pound	
Item FER3012	Each \$5.10**
Potassium Sulfate (Potash), 50 Pounds	
Item FER3010	Each \$60.75

GUARANTEED ANALYSIS

Soluble Potash (K ₂ O).....	52%
Sulfur (S).....	18%

Mono- Ammon- Phosphate , 1 Pounds	
Item FER3008	Each \$2.45
Mono- Ammon- Phosphate , 50 Pounds	
Item FER3008	Each \$94.50

Pre-EMPT Organic Hydroponic Fertilizer

Pre-Empt is a revolutionary product, which can completely replace your conventional hydroponic fertilizer program. Pre-Empt was developed for Recirculating NFT (Nutrient Film Technique) crops such as lettuce, basil and other leafy greens and herbs.

Pre-Empt is a multi-staged fermented molasses product. The fermentation process packs Pre-Empt with essential macro-nutrients, micro-nutrients, amino acids, as well as an array of vitamins that builds a full spectrum that your plants desire. Due to this process, there is little need to supplement PreEmpt with any micro or macro nutrients.

Our research has shown that Pre-Empt does not need to have any pH adjusters added to the product in order for the plants to receive optimum nutrient absorption, although some wells may vary. PreEmpt can be used in conjunction with other products including other fertilizers, insecticides and fungicides.

5 Gal Sample	
Item FER3001	Each \$130.00
275 Gal Tote	
Item FER3000	Each \$3,000.00

*For PH Testing see page 39

PH Adjusters

To maximize plant growth, the pH content of your nutrients should be slightly acidic. Experienced growers consider the ideal pH for most crops to fall between 5.5 and 6.5. Users of General Hydroponics nutrient products generally do not experience problems maintaining the proper pH range because our formulas are pH buffered. However, some important exceptions do exist. Acid content can reach unacceptable levels when nutrient solutions are mixed with poor quality water, or pH unstable media - such as rock wool and gravel products - are used, and when high plant growth rates destabilize the nutrient mix due to rapid nutrient absorption by the crop.

PH Up

pH Up: Base formulated using Potassium Hydroxide and Potassium Carbonate. Add a little at a time if your nutrient pH is too low in order to raise the pH to the proper level.



PH Up , 1 Gallons	
Item HYD5003	Each \$26.90

PH Down

pH Down: Acid formulated using food grade Phosphoric acid. Just add a little at a time if your nutrient pH is too high in order to lower the pH to the proper level.



PH Down , 1 Gallons	
Item HYD5002	Each \$26.90

**** Ships as HAZARDOUS: Add \$31.36 per carton**

FUNGICIDE

OXIDATE 2.0

Broad Spectrum Bactericide / Fungicide

OxiDate 2.0 Broad Spectrum Bactericide/Fungicide kills bacterial and fungal pathogens, offering superior crop protection. Use for curative and preventative applications, or tank mix with other residual fungicides to help provide immediate knockdown control. With OxiDate 2.0, zero days to harvest and zero hour re-entry interval allow growers to spray right up to harvest. After contact, Oxidate biodegrades leaving no residue on crops. Use as seed treatment, transplant water application, foliar spray, or with overhead or drop irrigation.



Oxidate, 2.5 Gallons
Item FUN3000 Each \$132.00**
Oxidate, 5 Gallons
Item FUN3001 Each \$260.00**

CEASE

Cease can be used as a foliar spray and soil drench on ornamentals, trees, shrubs, flowering plants and greenhouse crops and vegetables grown under cover. It is a broad spectrum biofungicide targeting common fungal and bacterial diseases such as Botrytis, Pseudomonas, Xanthomonas, Erwinia, Powdery Mildew, Leaf Spot and Speck, Anthracnose and Rust.



Cease, 1 Gallon
Item FUN5000 Each \$73.95

GREEN CURE

GreenCure® the potassium bicarbonate-based fungicide is the safer alternative to harsh chemical fungicides.



- Kills powdery mildew and other diseases on contact and provides up to 2 weeks of residual protection
- Alternative to harsh chemicals
- Proven effective in 200 university trials and 12 years in organic agriculture
- Fully dissolves in water
- Odorless - no foul smell
- Sprays on evenly and sticks to plant surfaces
- Fruit and vegetables can be harvested as soon as 1 hour after spraying
- Does not restrict plant growth
- Compatible with many beneficial insects
- For Organic Production. Fulfills USDA's National Organic Program (NOP) requirements.
- makes 16 gallons

Green Cure, 8 Ounces
Item FUN4000 Each \$15.95

Milstop

A potassium bicarbonate-based, foliar fungicide that kills powdery mildew on contact by pulling water from spores and their growing strands. Preventative control of foliar diseases: Diseases controlled include Alternaria blight, Anthracnose, black spot, Botrytis blight, Cercospora leaf spot, Downy Mildew, Phomopsis blight, and Septoria leaf spot



Milstop, 5 Pounds
Item FUN5001 Each \$59.95

MYCOSTOP

A biofungicide for vegetable & ornamental crops grown in greenhouses. For control of Fusarium, damping-off, root rot and Phomopsis and has shown suppression of Botrytis Gray mold, Pythium and Phytophthora root rots in the greenhouse. Formulated as a wettable powder, containing living spores and mycelium of a selected strain of naturally occurring Streptomyces soil bacterium which deprive pathogen fungi of living space and nourishment. Application should begin at the time of seeding and should be repeated every 3 - 6 weeks. Apply at a rate of 5 grams per 540 square foot of "root area".



Mycostop, 5 Grams
Item BEN4000 1-4 \$27.00
5 + \$25.20

Mycostop, 2 Grams
Item BEN4002 1-4 \$13.95
5 + \$12.30

Suffoil-X

Suffocates and kills eggs, larvae, nymphs and adult soft bodied insects and mites. Controls fungi including powdery mildew. Unique formulation stays in suspension better than other oils. Smaller oil particles provide uniform coverage with less chance of phytotoxicity. Use on vegetables, nursery, landscape, ornamental and greenhouse crops

4-hour REI
Suffoil-X, 2.5 Gallon
Item FUN5002 Each \$73.95

INSECTICIDE

BOTANIGARD WP

When combined with a beneficial insect control program, BotaniGard will greatly enhance the control of whiteflies, thrips, and aphids. Available in wettable powder only.



Botanigard WP, 1 Pound
Item INS1017 Each \$79.75

DIPEL DF

The active ingredient, Bt kurstaki, is a naturally occurring bacteria which works against the tomato hornworm, loopers, cutworms, imported cabbage worm, armyworms, etc.



Dipel, 1 Pound Bag, Dry
Item INS1000 Each \$18.30

PYRETHRUM TR

Total Release Insecticide Canisters
Ready to use, these insecticide canisters are placed in the center of section to be treated. Safe on greenhouse vegetables and herbs up to day of harvest. Effective on: ants, aphids, beetles cabbage worm, caddisflies, centipedes, cockroaches, crickets, fleas, flies, fungus gnats, hornworm, house flies, leafhoppers, mealy bugs, mites, moths, rose chafer, rose slug, scale, silverfish, spider mites, spiders, trogloderma, weevils and whiteflies.

Pyrethrum TR, 2 Ounce Can, 1500-3000 S.F.
Item INS1011 Each \$22.00
Item INS1025 Each \$22.00

**** Ships as HAZARDOUS:
Add \$31.36 per carton**

PYLON

Pylon® TR total release insecticide provides control of mites, thrips and adult fungus gnats. It is a miticide/insecticide that offers quick and easy application, thorough coverage, excellent plant safety and flexible re-entry times. For use in: Commercial greenhouses only on ornamental crops and fruiting vegetables. Use on bedding plants, cut flowers, foliage, potted flowering plants, ornamentals and on flowering hanging baskets. Pylon TR total release insecticide is labeled for use on ornamental crops and fruiting vegetables grown in commercial greenhouses. It also may be used on bedding plants, cut flowers, flowering hanging baskets, foliage, fruiting vegetables, potted flowering plants and ornamentals.

Item INS1025 Each \$22.00

M-PEDE INSECTICIDE SOAP

Safe Methods For Controlling Pests
M-Pede is a biodegradable, fatty acids contact insecticide for control of aphids, spider mites, whitefly, and thrips. M-Pede is generally effective on larval, nymphal and adult life stages. M-Pede is an excellent organic alternative to conventional insecticides.



M-Pede, 2.5 Gallons
Item SAF1001 Each \$102.00

AZAGUARD OMRI listed

AzaGuard is a 3% Azadirachtin formulated Insect Growth Regulator (IGR) that offers broad spectrum insecticidal control on over 300 insect species. AzaGuard prevents molting between larval, pupal and nymphal stages reducing insect infestations in/ around the facility. AzaGuard's natural botanical formula meets all of the requirements of the National Organic Program (NOP), and is an important tool in Integrated Pest Management (IPM) and sustainable disease control programs.



Azaguard, 1 Quart
Item INS1030 Each \$135.00

INSECT TRAPS

STICKY STRIPS AND STICKY RIBBONS

Sticky Strips and Sticky Ribbons provide a safe method of trapping insects and can reduce or eliminate the use of harmful chemicals in your hydroponic garden. Sticky Strips are a yellow 3 x 5 inch card that is coated with a specially formulated trapping compound that will survive repeated wetting and drying cycles and exposure to sunlight. The unique yellow color attracts certain insects to it and once they land, they are stuck for good! When Sticky Strips are full of insects, dispose of them and replace with new ones. Use them with the galvanized stakes to hold them in pots or benches.

3 x 5 inch Yellow Sticky Strips, 100/Box
Item STI1004 Each \$43.25

6 x 12 inch Yellow Sticky Strips, 50/Box
Item STI1005 Each \$76.00

2 inch Sticky Tape, 530 Foot
Item STI1100 Each \$49.75

Sticky Strip Stakes, 100/Box
Item STI1007 Each \$39.95

BENEFICIALS

Aphid Control Use:

- Lacewings (Chrysopa Carnea)
- Ladybugs (Hippodamia Convergens)
- Gall-midge (Aphidoletes Aphidimyza)

For aphid control, we suggest a combination of lacewing larvae and eggs. Lacewing larvae arrive ready to work as soon as released. Lacewing eggs should be sprinkled around the plants that are infested with aphids.



To stop the growth in population of aphids, release approximately one lacewing for every 10 aphids that are present. Two to three releases, two weeks apart, should be made.

LACEWING, 1,000

Item **BEN1428** LARVAE \$73.75
Item **BEN2102** EGGS \$17.50

Ladybugs (Hippodamia convergens) are an additional predator insect effective in controlling aphids. They are not always available, however. They may be used in conjunction with lacewings. (seasonal)

LADYBUGS

1/2 Pint	Item BEN1880	Each \$39.00
1 Pint	Item BEN1881	Each \$48.00
1 Quart	Item BEN1882	Each \$63.00
1/2 Gallon	Item BEN1883	Each \$95.00
1 Gallon	Item BEN1884	Each \$120.00

Gall-midge (Aphidoletes aphidimyza) adults are active at night. They find aphid colonies by the smell of the honeydew. The female gall-midge deposits small orange eggs near the aphids. The emerging larvae paralyzes one aphid after another and sucks each dry.

Aphidoletes Aphidimyza:

APHIDEND

Target: wide range of aphid species; recommended especially when aphid colonies are present.

To use: Open bottle in the greenhouse, hang the bottle in between the plants. Store in the dark.

100 ml bottle (2,000 pupae)

Item **BEN1250** Each \$101.75

Aphisius Colemani:

APHIPAR

Target: aphids, in particular the cotton aphid, tobacco aphid and the peach potato aphid; especially useful when aphid infestations are beginning.

To use: Spread material on rockwool slabs or in application boxes. Store in the dark.

100 ml bottle (1,000)

Item **BEN1260** Each \$54.25

Aphidius Ervi:

ERVIPAR

Target: aphids, in particular the potato aphid and glasshouse potato aphid; especially useful when aphid infestations are beginning.

To use: Sprinkle mummies with buckwheat on rockwool and leave it there for at least one week. Store in the dark.

250 ml bottle (500 adults)

Item **BEN1272** Each \$104.75

Leaf-Miner Control Use:

- Dacnusa Sibirica
- Diglyphus Isaea



Dacnusa Sibirica:

MIGLYPHUS

Target: leaf-miners in second and third stages.
To use: Release parasitic wasps between leaves in the morning or in the evening.
Store in the dark.

100 ml bottle (500 adult)

Item **BEN1292** Each \$175.00

Fungus Gnat Control Use:

- Steinernema Feltiae
- Hypoaspis



Steinernema Feltiae/ Nematodes:

ENTONEM

Target: sciarid flies, larvae.
To use: Put in the contents of the package into a bucket containing 5 liters of water. Stir well and leave the solution to soak for 20-30 seconds. Stir well again and pour the entire content into spray tank. Spray immediately after preparation. Store in the dark.

Pot in a box (50 million larvae) (in clay carrier)

Item **BEN1461** Each \$32.50

Hypoaspis:

ENTOMITE

Target: small soil living insects and some nematodes.
To use: Turn and shake the bottle or bag gently before use. Spread material evenly on rockwool blocks. Do not apply close to stem to avoid plant damage. Store in the dark.

Bottle (10,000 mites)

Item **BEN1467** Each \$32.50

Vine Weevil Control Use:

Heterorhabditis Megidis:



LARVANEM

Target: curculionids, such as the vine weevil, larvae.
To use: Put the contents of the package into a bucket containing 20 liters of water. Stir well and leave the solution to soak for 5 minutes. Mix well again. Pour entire content through a fine sieve into spray tank. Spray immediately after the preparation. Store in the dark.

(50 million larvae)

Item **BEN1451** Each \$36.50

BENEFICIALS ORDERING INFORMATION

Plan ahead when using beneficials! Beneficials must be ordered by **12:00 noon** on **Monday** to ship **Next Day Air Thursday** for delivery **Friday**. Or ordered by **12:00 noon Wednesday** to ship the following **Tuesday** for delivery **Wednesday**.

Lacewing eggs and ladybugs are shipped on Mondays, Tuesdays and Wednesdays.

We will make every attempt to have your order delivered as quickly as possible. However, due to unpredictable weather, production variations, holidays, etc., some shipments may be delayed.

The effectiveness of any pest management program will depend greatly on early detection, proper release rates, maintaining the proper environment and, your cultural practices. Biological control methods need some time to become well established. Successive releases are often necessary to help establish overlapping generations of the beneficials. If you have an existing pest problem, the use of beneficials may need to be delayed until the pest population has been reduced by other means. We will be happy to assist you with developing a biological control program.

We may also have access to newly cultured beneficials not listed here.



Shop online at
www.CropKing.com

INTEGRATED PEST MANAGEMENT

(IPM) is the combination of several methods of managing insect problems.

These methods may include some or all of the following:

- Environmental Control
- Insect Barriers
- Insect Traps
- Insecticides and Fungicides
- Beneficial Organisms

The goal of IPM is not necessarily the eradication of all pests, but rather, the control of the pest population to achieve a balance so that no economic damage is being caused by the pests. A limited amount of the pest will continue to survive in your crop, regardless of the method of control you choose. Using chemical insecticides should only be considered as a last resort, and if IPM is begun early and practiced properly, chemicals may never have to be used.

Using beneficial insects is safer than chemicals, and is generally less expensive. It takes some time to get the beneficials established in your crop, so you need to begin planning your program early, preferably six months in advance. When using beneficials, monitoring the harmful pests is important. Use Sticky Strips or Sticky Cards at the rate of at least one per 250 sq.ft. If thrips are suspected, use blue sticky traps in addition to the yellow ones.

Our technical service staff can help you determine the right beneficials program for your greenhouse. We handle several beneficials, a few of which are listed below. If you are in need of one not shown, we can probably get it for you.

BENEFICIALS

Whitefly Control Use:

- Encarsia Formosa
- Eretmocerus Ermicus



Encarsia formosa is a tiny parasitic wasp that will lay 50 to 100 eggs into greenhouse whitefly larvae. They work best if ordered as soon as the first whitefly is seen in the greenhouse. Usually three to four introductions, one to two weeks apart, at the rate of one per sq.ft. will establish them.

Additional introductions may be necessary if whitefly persist. Be sure to use yellow sticky traps to monitor whitefly populations.

*NOTE: If you determine whiteflies in your greenhouse, it is important to identify the specific type. The more familiar Greenhouse Whitefly is very successfully controlled by the beneficial wasp, encarsia formosa. Sweet Potato Whitefly and Silver Leaf Whitefly are more effectively controlled by eretmocerus ermicus, which is also recommended for Greenhouse Whiteflies in the summer when temperatures in the greenhouse are higher. Encarsia Formosa:

EN-STRIP

Target: greenhouse whitefly and sweet potato whitefly in the third and fourth larval stage. Preference for greenhouse whitefly. To use: open package carefully inside the greenhouse. Bend Strips and tear off. Start tearing opposite hang-up hole, suspend the cards in the crop. Not in direct sunlight. Do Not Touch the pupae. Store in the dark. Box of 50 cards (3,000 pupae)

Item **BEN1210** Each **\$35.30**

Eretmocerus Ermicus:

ERCAL

Target: greenhouse whitefly and sweet potato whitefly in the second and third larval stage. To use: open package carefully inside the greenhouse. Bend Strips and tear off. Start tearing opposite hang-up hole, suspend the cards in the crop. Not in direct sunlight. Do Not Touch the pupae. Store in the dark. Box of 50 cards (3,000 pupae)

Item **BEN1433** Each **\$47.75**

Box of 250 cards (15,000 pupae)

Item **BEN1434** Each **\$205.50**

Eretmocerus Ermicus and Encarsia Formosa:

ENERMIX

Target: greenhouse whitefly and sweetpotato whitefly in the second to fourth larval stage. To use: open package carefully inside the greenhouse. Bend Strips and tear off. Start tearing opposite hang-up hole, suspend the cards in the crop. Not in direct sunlight. Do Not Touch the pupae. Store in the dark. Box of 50 cards (1,500 pupae)

Item **BEN1236** Each **\$42.75**

Thrips Control Use:

- Amblyseius Cucumeris
- Orius Laevigatus
- Orius Insidiosus



Amblyseius cucumeris are predatory mites, tan to orange in color and are similar looking to the spider mite predator. The predator population must be established early in the crop, before you see evidence of thrips. Introduce at the rate of one predator per sq.ft., two weeks after transplanting. Repeat applications every month during periods of warm, dry weather.

Amblyseius Cucumeris:

THRIPEX

Target: various thrip species; hatching eggs and larvae. Predatory mites also eat spider mites. To use: Turn and shake gently before use. Sprinkle material on leaves or apply on crop with mechanical blower. Store bottles horizontally in the dark. 50,000 mites per bottle (all stages)

Item **BEN1375** Each **\$ 39.75**

Orius Laevigatus or Orius Insidiosus:

THRIPOR

Target: various thrips species; larvae and adults In the absence of thrips can also survive on pollen. To use: Turn and shake gently before use. Spread material on clean rockwool slab, leaves and/or in application boxes. Store in the dark. 500 ml bottle (1,000 adults and nymphs)

Item **BEN1401** Each **\$134.50**

Whitefly/Thrip Control Use:

Amblyseius Swirskii

SWIRSKI-MITE

Target: whitefly and thrip in all larval stages. Turn and shake gently before use. To use: Press on center of cap to open dosage hole. Sprinkle material on leaves. Store in the dark. (50,000 adult mites)

Item **BEN1540** Each **\$117.50**

Spider Mite Control Use:

- Phytoseiulus Persimilus
- Amblyseius Californicus



Predatory mites can be very successful in controlling spider mites as they will multiply nearly twice as fast as the spider mite population. As a preventative measure, introduce Phytoseiulus persimilus at the rate of 1 predator for every 5 sq.ft. of greenhouse area, just after transplanting. Repeat this two weeks later. For control of an existing problem, introduce at the rate of 1 predator for every 25 to 50 spider-mites. The more you introduce, the quicker you will gain control.

Phytoseiulus Persimilis:

SPIDEX

Target: two spotted spider mite and carmine spider mite: all stages, preferring younger stages. Now also effective on mites on tomato plants.

To use: Turn and shake gently before use. Sprinkle material on leaves or pour into application boxes. Store in the dark. 100 ml bottle with dosage-plug (2,000 adults)

Item **BEN1318** Each **\$20.25**

Amblyseius Californicus:

SPICAL (use in conjunction with SPIDEX)

Target: two spotted spider mite, carmine spider mite and fruit tree red spider mite: all stages, preferring younger stages. Predatory mites also survive on other mites and can survive for a number of weeks without food.

To use: Turn and shake the bottle gently before use. Sprinkle material on leaves. Store in the dark

500 ml bottle (5,000 all stages)

Item **BEN1490** Each **\$66.75**

Feltiella Acarisuga (gall-midge):

SPIDEND (use in conjunction with SPIDEX)

Target: various species of spider mites, especially when spider mite occurs in colonies. To use: Make a hole in the paper in the lid on the beaker and put it on the rockwool slab. Protect against direct sunlight. Store in the dark. 750 ml bottle (pupae, from which 250 gall-midges will emerge)

Item **BEN1435** Each **\$125.75**

TECHNICAL SERVICE PACKAGE

This package offers you the most complete technical service program available in the hydroponic industry. You'll receive all the following for less than half of the retail price when purchased separately.

- One Year Technical Support
- Unlimited interpretation of water and leaf analysis
- Custom fertilizer design
- Telephone support from our Technical Staff
- Grower Training Workshop for 2 participants
- Comprehensive Grower Training Manual
- Training Workshop on DVD, 3 Volume Set
- Growing System DVD

Item **TEC1003** Each \$2,995.00

* \$1795.00 with purchase of greenhouse package

DVDs

Introduction to Soilless Controlled Environment Agriculture

Item **DVD1200** Each \$FREE

+4.95 for Shipping & Handling

Advanced Cultural Practices

Topics covered in the video:

- Clipping
- Suckering
- Pollination
- Cluster Pruning
- Truss Support Installation
- Leaf Pruning
- Leaning and Lowering
- Growing Point Removal
- Fruit Picking

Item **DVD 2003** Each \$59.95



Advanced Fruit Load Management

Illustrates pruning and other factors that affect the setting, development and production of fruit.

- Benefits of Cluster Pruning
- Techniques for Pruning
- Abnormal Cluster Growth
- Differences in Cluster Growth
- Cluster Support
- Fruit Set
- Blossom Development

Item **DVD2002** Each \$59.95



TECHNICAL ASSISTANCE PACKAGES

Ask about our full Technical Packages

Technical Services:

- Custom fertilizer recipe designed for grower's water source
Item **TEC1007** Each \$200.00
- One 15-minute increment of technical support (phone only)
Item **TEC1009** Each \$25.00
- Review, interpretation, and advisement on leaf, tissue and solution analysis
Item **TEC1010** Each \$35.00
- Site visit to your greenhouse, per each 8 hour day (travel expenses are additional)
Item **TEC1011** Each \$500.00

NFT Lettuce Production

Learn from Jim Brown, the details of NFT Lettuce Production.

Starting with seeding to harvesting, demonstration and explanation of the procedures and techniques involved in growing Nutrient Film Technique Lettuce is presented.

Key topics include:

- Seeding and Harvesting Schedule Adjustments
- Seeding Media Selection and Preparation
- Seeding Procedure
- Sequence of Plant Ages on the Nursery Table
- Transplanting Seedlings into the Channels
- Placing the Channels into the Fertilizer Feed System
- Progressive Growth of Bibb lettuce
- Harvesting and Packing lettuce in Crispers
- Harvesting Basil
- Lettuce Storage in Refrigeration
- Nutrient Feed System Operation

Item **DVD1300** Each \$29.95



TWO DAY GROWERS WORKSHOPS

With consumer demand for hydroponic produce increasing significantly, it is imperative to have the knowledge and tools available to make your hydroponic facility more productive and profitable. Why experiment or “reinvent the wheel” when you can benefit from years of accumulated knowledge in hydroponics that we cover in this Workshop? Starting off with the right information can have a significant impact on the success of your operation. This workshop can provide you with that information!

Two Day Grower Workshop: \$595.00 per person (bring 1 guest for free, each additional guest is \$250)



- 2 Days Training
- 1/2 days in Classroom
- 1/2 days in Greenhouse
- Interactive Training
- Lunch Provided



Classroom session each morning with presentations on the following topics: Hydroponics, Basic Botany, Soilless Production Systems, Environmental Control, Source Water Needs, Nutrient Management, Resource Identification

Several types of soilless culture are covered with the primary focus on the Bato Bucket system for vine crops and NFT system for leaf crops. The main crops discussed are tomato, cucumber, lettuce and herbs.

FIVE DAY INTENSIVE WORKSHOPS

This five day immersive course provides expanded practical experience working in a production greenhouse featuring a larger emphasis in hands-on work with the plants and growing systems. The content covered in our Intensive Workshop will be tailored to the individual’s skill and experience level.

Participants will receive small group (2-person max) instruction and guidance with the end goal of fostering a greater understanding of the inner workings of a hydroponic greenhouse and the various disciplines involved in a successful operation.

Please call for date availability

- 5 Days Training
- Tailored to individual skill levels
- Small group attention
- Interactive Training
- Lunch Included

Five Day Intensive Workshop: \$2500 per person

Call our CropKing salespeople at 330-302-4203 or visit cropking.com for more workshop information. Workshops are filled on a first come first serve basis.

BUSINESS PLAN TEMPLATE

Our Business plan helps with cost estimates, projected income and a complete background on the system you are considering. Whether it is NFT Lettuce System or a Bato Bucket System for Tomatoes, the Business Plan Template contains the information your banker will want to see.



Item **CDR2020**
Each \$99.00

GROWER TRAINING

The classroom powerpoint portion of our workshop covers both botany and the environmental factors in the greenhouse. Also discussed are the different pieces of equipment and their specific function on a hydroponic greenhouse. The main cultural chores of a hydroponic greenhouse are described and demonstrated. This presentation can be used to train greenhouse workers on cultural procedures.



Item **DVD1400**
Each \$295.00

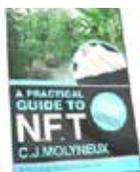
BOOKS

A Practical Guide to NFT

By C.J. Molyneux

This book sets out the principles and practices of the technique in a concise but thorough manner. With this guide at hand, anyone can introduce NFT.

Item **BOO0027** Each \$35.00



Hydroponic Food Production

By Howard M. Resh

A complete manual and an encyclopedic reference work on soilless food production. Technically comprehensive with nearly 400 photographs and detailed drawings on every form of hydroponics for temperate, tropical, or cold climates.

Item **BOO0001** Each \$59.95



A Tomato a Day

By Francisco Contreras

Discover why a tomato is the next superfood, a powerful anti-cancer agent, a foundation of youth and a promoter of heart health.

Item **BOO0099** Each \$6.95

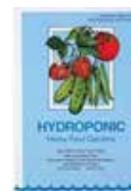


Hydroponic Home Food Gardens

By Howard M. Resh

An abundance of new information, written for easy reading, and productive action. Shows home gardeners how to grow fruits and vegetables in a clean, nutritionally perfect soilless medium; how to say goodbye to problems of infertile or infested soil, weeds, pests; how to give plants super nutrition for super growth, appearance, and quality. Scores of photographs, drawings and diagrams make it easy to have a variety of gardens a simple home hydroponic window, deck trays, containers, full-scale hydroponic gardens or small greenhouse projects right at home.

Item **BOO0021** Each \$15.50



Hobby Hydroponics 2nd Edition

By Howard M. Resh

A guide to all aspects of home hydroponics culture and systems, providing the most up-to-date information on hobby hydroponic growing, including the numerous advancements in concepts, technology, and products since the first edition.



New this Edition:

- Discusses new hobby units and components including lights, CO2 generators, and testing equipment
- Updates available nutrients and new products such as mycorrhizae
- Includes many new photographs
- Provides up-to-date references, suppliers, and websites
- Making hydroponics accessible to everyone willing to learn and apply the knowledge, this book provides the information necessary to start, grow, and reap the rewards of having your own hydroponic crops.

Item **BOO1006** Each \$26.95

FOLLOW US ON
SOCIAL MEDIA



Hydroponic Tomato Production

By Jack Ross

A practical guide for growing tomatoes in containers. Over 200 pages of tomato information, from nutrients to schedules. For greenhouse growers and hobbyists alike, hydroponics has become recognized as a way of producing tomatoes with flavor. This book looks comprehensively at the range of soilless techniques available and how to manage them successfully. Includes a listing of 20 tomato varieties for hydroponic production in containers, and how to grow them successfully. Chapters included on physiology of tomatoes, nutrient levels, and pH requirements, growth factors, pests & diseases, harvesting and packaging. Jack Ross has been involved in producing hydroponic tomatoes for over 16 years.

Item **BOO0080** Each \$39.95



Hydroponic Tomatoes for the Home Gardener

By Howard M. Resh

Step-by-step instructions, with many clear, "show-me-how" illustrations, both photographs and drawings.

Item **BOO0042** Each \$16.00



Hydroponics "A Practical Guide for the Soilless Grower"

By Dr. J. Benton Jones

Gives detailed descriptions of the most commonly used hydroponic growing procedures. Provides clear explanations of the advantages and disadvantages of each hydroponic growth system. Describes the basic concepts of the plant growth and development. Lists the numerous solution formulas and ways these solutions can be used and monitored. Outlines experiments that can be used by students to successfully grow plants hydroponically.

Item **BOO 0084** Each \$87.00



Hydroponics Q & A for Successful Growing

By Howard M. Resh

287 Questions and Answers on topics like nutrition, essential elements, water, diseases, environmental conditions, nutritional disorders, sterilization, herbs and other food crops. Finds helpful pointers on growing many specific products. This paperback book is well indexed and illustrated to easily find the answers you need.

Item **BOO0078** Each \$16.85



Knowing & Recognizing The biology of glasshouse pest and their natural enemies

By M. Malais and W.J. Ravensberg

Book covers life cycles of pests and beneficials, background information on how to make a beneficial program work. A "must" for the grower who uses beneficials for pest control. Many diagrams and colored pictures.

Item **BOO0040** Each \$140.00



Tomato Plant Culture

By Benton Jones

A comprehensive factual information about tomato plant culture and fruit production, beneficial to plant scientists and commercial field and greenhouse growers as well as the home gardener. Data compiled focuses on the more recent literature, including information about the cultural characteristics of the plant; fruit production and related quality factors; and environmental and nutritional requirements for both field- and greenhouse-grown plants.

Item **BOO0083** Each \$88.30

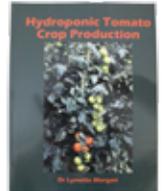


Hydroponic Tomato Crop Production

By Lynette Morgan, PhD,

Filled with up-to-date information on hydroponic tomato production from expert growers. Complete guide includes background on the tomato plant, types of tomatoes and seed suppliers, proper growing environment, organic production, nutrient management, propagation, systems of production, fruit quality, pests and diseases, and harvesting and handling.

Item **BOO0010** Each \$79.95

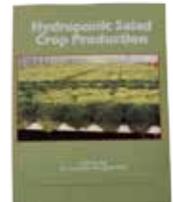


CropKing Growers Manual

By Lynette Morgan, PhD,

Lettuce crops continue to dominate hydroponic salad production in volume and this book encompasses all of the most recent developments, scientific findings, research, and grower experience to present the definitive information on hydroponic lettuce production.

Item **BOO0079** Each \$79.95



CropKing Growers Manual

By Natalie Bumgarner, PhD,

Growing instruction for use with CropKing growing systems. This guide will walk you through how to grow in a CropKing NFT or Bato Bucket system. This book is a great resource for anyone who has bought a CropKing system used.

Item **BOO 4000** Each \$495.00



TOMATO, BEEFSTEAK

FORONTI

This large beef tomato has good plant vigor and fruit set that contribute to its high yield potential in ungrafted greenhouse production. Round, smooth fruit are similar in size and shape to Torero. Powdery mildew resistance can make it a little low light sensitive under some conditions. More vigorous plant than Torero, but comparable fruit.

Foronti, 250 Seeds
Item **TOM1700** Each \$151.00

DRW 7749

Red big beef tomato with high yield potential. Open leaf structure and strong plant that should be steered generatively. Fruits have good taste and shelf life and also have a somewhat distinctive flatter shape with more ribbing. Average weight 220 grams. Powdery mildew resistance.



DRW 7749, 250 Seeds
Item **TOM1050** Each \$162.00

GERONIMO

Vigorous plant with good vegetative growth for warmer and more stressful production conditions. Average fruit weight is 240 grams, but can be more variable under summer conditions. Powdery mildew resistance along with good crack resistance and flavor.



Geronimo, 250 Seeds
Item **TOM1150** Each \$127.00

TOMIMARU MUCHOO

This is an Asian style pink tomato preferred in Japanese culture for its sweet, less acid flavor profile. This tomato is medium to firm in texture. These are vigorous plants with a broad range of disease resistance perfect for greenhouse growing.

Tomimaru Muchoo, 250 Seeds
Item **TOM1950** Each \$94.00

TORERO

Red beef tomato with large (250 grams) fruit size (especially in early clusters) and good yield potential. Fruits are consistently round and firm with good shelf life. Plants are labor friendly as they are more generative than Geronimo, Foronti, and Rebelski. Torero can be grown ungrafted, but for long crops carried through hot summers, grafting could provide a benefit.



Torero, 250 Seeds
Item **TOM1500** Each \$143.00

TRUST

Older greenhouse beef tomato cultivar with a more generative habit. This cultivar can be an easy to manage crop, but is not as strong through summer heat as some of the newer, more vegetative cultivars. Average fruit weight of 180-280 grams.

Trust, 250 Seeds
Item **TOM1037** Each \$97.00

BIG DENA

This vigorous and productive cultivar is appropriate for ungrafted cultivation in heated greenhouses. The vigor of this cultivar makes it well suited to maintain summer growth. Large beefsteak tomato fruit (230-280 gram) are slightly ribbed with good taste.

Item **TOM1760** \$120.00 (250 pack)
Item **TOM1760** \$450.00 (1,000 pack)

BEORANGE

Beorange is an orange beef tomato hybrid with good taste and flavor.

Beorange, 250/pack
Item **TOM1400** Each \$209.00



TOMATO, GRAPE

DASHER

Red grape with a good taste and an average fruit weight of 20 to 25 grams. Open plant with moderate vigor. Really the only grape that we have with higher production. There are some other possibilities as far as yellows, but yield is lower.



Dasher, 250 Seeds
Item **TOM1275** Each \$150.00

TOMATO, CHERRY

DRC-564

A cherry tomato that can be sold loose or on trusses. The fruit has excellent red color and taste with fruit that average approximately 18 grams. Similar or just slightly smaller size than Conchita. Higher brix with deeper red color, but may have shorter shelf life than Conchita.

DRC-564, 250 Seeds
Item **TOM1900** Each \$373.00

MICRO-TOM / TINY TIM

Dwarf cherry variety. Good for hanging baskets and small containers.

Micro-Tom, 20 Seeds
Item **TOM3000** Each \$4.00

FAVORITA

Cherry, red, semi-green-back, average fruit weight 13-17 grams. Slightly stretched. Vigorous growth, long and many double trusses. Excellent fruit shape, good flavor.



Favorita, 250 Seeds
Item **TOM1023** Each \$105.00

CONCHITA

Cherry tomato with firm fruits. Average fruit weight 20 grams. Fruit tend to be less red-slightly orange with moderately good taste. May have lower brix levels than DRC 564. Consistent producer.

Conchita, 250 Seeds
Item **TOM1034** Each \$180.00

RED DELIGHT

Shiny and nice deep red cocktail tomatoes. Open plant with strong vigor. Nice dark green plant with good summer behavior. Good shelf life and the truss stem stays green and fresh for a long time. Very strong against cracking.



Red Delight, 250 Seeds
 Item **TOM1109** Each \$267.00

TOMATO, CLUSTER

MERLICE

This large size truss tomato (155-160 grams) is a vigorous, but shorter length plant with a high yield potential. The plant has smooth, high round fruit and good stem quality. Merlice has powdery mildew resistance and can be more light sensitive than Komeett. For warmer brighter climates, this could be a good option or for those who value powdery mildew resistance.



Merlice, 250 seeds
 Item **TOM1800** Each \$196.00

KOMEETT

For the heated soilless glasshouse crops and the large size truss harvest segment in Europe and North America. Red, high round shape with an average fruit weight of 165 grams. Consistent all around performer, but does not have powdery mildew resistance.

Komett, 250 Seeds
 Item **TOM1600** Each \$147.00

TOMATO, COCKTAIL

DRC 1183

This cocktail truss tomato has an open, labor friendly plant habit with a high yield potential. The firm, light red fruit (35 to 40 grams) is strong against cracking and has good shelf life.



DRC 1183, 250 seeds
 Item **TOM1550** Each \$348.00

ROMA

ITALIA

This is a smooth roma tomato that averages 90-120 grams per plant and is strong producer for a smaller fruited tomato. Plants tend to be open and long, and may be a challenge in shorter greenhouses. Fruit maintains good quality in resisting blossom end rot.

Italia, 250/pack
 Item **TOM1650** Each \$153.00

PRUNUS

Prunus is a roma tomato hybrid suitable for both truss- and loose harvest. Prunus has high vigor resulting in high yield potential.

Prunus, 250/pack
 Item **TOM1300** Each \$177.00

TOMATO, CLUSTER

ORANGARO

Orange color. Average fruit weight = 3 oz. (100 grams). High Yield Potential. Can be harvested loose or as a cluster. Normal vigor, Mild flavor.

Orangaro, 250/pack
 Item **TOM1115** Each \$212.00

LORENZO

Lorenzo is a tomato on the vine with an attractive deep yellow color.

Lorenzo, 250/pack
 Item **TOM1151** Each \$212.00

EGGPLANT

TAURUS

Purple eggplant with high potential production due to it being very generative and its open plant habit. The shiny fruit are firm and have a small bow and slender shape, its color is very dark. The fruit have excellent shelf life.



Taurus, 100 Seeds
 Item **EGG1001** Each \$ 97.00

CUCUMBER

DENALI- LONG ENGLISH

This vigorous and productive long english cultivar has high powdery mildew resistance for summer production and umbrella systems. Denali will maintain medium plant habit through summer stress. The fruit are dark green, 13 to 15 inches long with good shelf life.

DENAL, 100 seeds
 Item **CUC1900** Each \$ 81.00

UNISTAR- COCKTAIL

This cocktail cucumber produces approximately 4 inch fruit. Under reproductive conditions, multiple fruit per node are produced.

UNISTAR, 100 seeds
 Item **CUC1950** Each \$ 101.00

CAMARO

This cultivar is partially tolerant to powdery mildew and is suitable for lower light production. Low susceptibility to Fusarium in the vigorous yet easy to grow cultivar. Camero can perform well under a variety of conditions.

Camaro, 100 Seeds
 Item **CUC1600** Each \$ 84.00

DRL9510

Good low light option similar to Camaro with slightly smaller fruit size.

DRL9510, 100 Seeds
 Item **CUC2000** Each \$85.00

ELDORA

Eldora is a long English cucumber with high resistance to Powdery mildew. Eldora is extremely well suited for high light conditions. Optimal planting window for most locations is from March through August.

Eldora, 100 Seeds
 Item **CUC1800** Each \$84.00

AVAYA

Avaya is a summer cucumber hybrid with improved fruit quality. De Ruiter trials showed a competitive level of production with improved fruit quality over the current market leaders. Avaya has the potential to produce a high percent of medium fruit with a nice dark-green color, good shape, and strong ribbing. Avaya has intermediate resistance to cucumber green mottle mosaic virus and high resistance to powdery mildew.

Avaya, 100 Seeds
 Item **CUC2050** Each \$73.00

CUCUMBER, Mini

JAWELL

This cultivar is suitable for year-round production and has partial powdery mildew tolerance. Fruit will be 5 ½ to 6 ½ inches and the plant can produce 1 or 2 fruit per node. Production is early and high with dark green slightly ribbed fruit. A short internode length make this cultivar appropriate for shorter greenhouses..

Jawell, 100 Seeds

Item **CUC1700** Each \$70.00

MANAR

This powdery mildew tolerant cultivar has strong vigor and excellent fruit quality. Slightly larger fruit than Jawell.

Manar, 100 Seeds

Item **CUC1500** Each \$53.00

BELL PEPPER

STRIKER (YELLOW)

Known for its strong performance, Striker is an industry leading yellow pepper that is extremely reliable under a majority of growing conditions. The large blocky fruit are uniform, weighing an average of 230 grams. It has high yield potential for producing quality fruit that have good shelf life.



Striker, 100 Seeds

Item **PEP2102** Each \$ 66.00

FANTASY (RED)

Blocky fruit shape with beautiful shiny red color. Vigorous yet open plant habit.



Fantasy, 100 Seeds

Item **PEP2100** Each \$66.00

PARAMO (ORANGE)

Bell Pepper that is 24 - 36 inches in height. Full Sun and water regularly; do no over water. Suitable for growing in containers.



Paramo, 100 Seeds

Item **PEP2101** Each \$58.00

MORRAINE (RED)

Morraine is a large blocky pepper with good plant vigor and can be picked green or red. Some of the advantages of Morraine are the deep red fruit color and large fruit size.

Morraine, 100 Seeds

Item **PEP2103** Each \$65.00

DR0713PB (ORANGE)

DR0719PB is an orange blocky pepper with very large fruit size throughout the entire season. The extended shelf life creates high value to both grower and downstream users. DR0719PB has intermediate resistance to Tomato spotted wilt virus.

DR0713PB, 100 Seeds

Item **PEP2104** Each \$86.00

LETTUCE, BIBB

TEODORE- RED BIBB

A large red butterhead that has ruby coloration half way down the leaf while the lower portion has a brilliant green contrast color. Resistant to Bl: 1-26/Nr/LMV.

Teodore, 5,000 Seeds

Item **LET2015** Each \$118.00

ALEXANDRIA

An indoor lettuce variety for summer, which produces blonde to medium green heads with medium thick leaves and a large frame. Slow bolting and strong against tipburn. Similar to Flandria, but with a slightly wider range of downy mildew resistance. Bl: 1-23.

Alexandria, 5,000 Seeds

Item **LET2009** Each \$106.00

FLANDRIA

Thick-leaved butterhead variety for year-round production; excellent quality and shelf life.



The plant has a strong base with few yellow leaves and is strong against tipburn and bolting. Slightly more loose and open head than Rex with a wider range of downy mildew resistance. Resistant to Bl: 1-16,17,19,21.

Flandria, 5,000 Seeds

Item **LET1063** Each \$106.00

NATALIA

A blonde butterhead lettuce for summer production that was bred and is well adapted for the autumn and spring markets as well. Similar visually to Alexandria and Flandria. Resistant to Bl:1-26.



Natalia, 5,000 Seeds

Item **LET2013** Each \$112.00

REX

This cultivar has been well known as a reliable bibb crop in hydroponic greenhouses for many years. It can be grown as a year round crop, but is well suited for spring and summer production due to being strong against tipburn and bolting. Thick fairly dark green leaves mature to form a clear head. Resistant to Bl 1-7, 10, 11, 12.



Rex, 5,000 Seeds

Item **LET2003** Each \$106.00

SANTORO RZ

A larger frame size bibb lettuce with excellent color under warm conditions with a broad resistance package.



Leaves are smooth with good resistance to tipburn, and the heads are slow to bolt. This cultivar tends to have larger frame sizes and less dense heads under low light conditions. Resistant to Bl: 1,4-22,24,25/ Nr/Pb/LMV

Santoro, 5,000 Seeds

Item **LET2011** Each \$120.00

SKYPHOS

A large red butterhead that has ruby coloration half way down the leaf while the lower portion has a brilliant green contrast color. For a red cultivar, Skyphos is slow bolting and resistant to tipburn. Under lower light conditions, the frame size tends to increase and leaf coloration decrease. Resistant to Bl: 1-26/Nr/LMV.



Skyphos, 5,000 Seeds

Item **LET2014** Each \$130.00

GARDIA

Butterhead variety similar to Flandria. Strong against tipburn and bolting.



Gardia, 5,000 Seeds

Item **LET2040** \$112.00

*All Lettuce Seeds
are Pelleted.*

LOLLA

CARMESI- Lolla Rossa

This triple red lolla rossa has a deep red color over a large portion of the leaf. It is slow bolting, but may have a slightly slower growth rate than a typical bibb crop. Bl:1-28,30,31/Fol:1/Nr:0

Carmesi, 5000 Seeds
Item **LET2025** Each \$131.00

ORVILLE- Lolla Rossa

This double red lolla rossa is quite similar to Carmesi in size and growth characteristics, but with a lighter red coloration more concentrated on the edges of the leaves. Bl:1-31/Nr:0

Orville, 5000 Seeds
Item **LET2030** Each \$120.00

LOZANO- Lolla Bionda

This lolla bionda has a light green color and a compact frame size. The leaves have a very fine margin and the plant is strong against tipburn. Developed for autumn, winter, and spring greenhouse production. Bl:1-31/Nr:0

Lorano, 5000 Seeds
Item **LET2035** Each \$133.00

LETTUCE, OAKLEAF

KIREVE

Green oakleaf solid producer in greenhouse production.



Kireve, 5000 Seeds
Item **LET2045** \$128.00

RUTILAI

Red oakleaf with strong coloration on tip. Strong resistance to edge burn and bolting.



Rutilai, 5000 Seeds
Item **LET2050** \$114.00

LETTUCE, ROMAINE

SALVIUS- GREEN ROMAINE

A tall, dark green romaine cultivar with medium savoyed leaves. Salvius tends to remain open for a longer period of time than Helvius and can have a bit more leaf texture. Bl:1-26,28/Nr:0, IR: Rs

Salvius, 5000 Seeds
Item **LET2020** Each \$104.00

HELVIUS RZ (41-64 RZ)

Medium green color with a very erect habit with a slight savoy leaves. It has fairly strong resistance to internal burn and is slow bolting. Bred more for main and fall seasons, does not perform as consistently under low light winter conditions. HR: Bl:1-26/Nr:0, IR: LMV, Rs



Helvius, 5000 Seeds
Item **LET2004** Each \$87.00

LETTUCE, MIX

Mix Endless Summer

Supplied as multi-species multi-pellet, with 3 or more seedlings per pellet. The first multi-species multiseed pellet for salad. SimplySalad is easy to produce, with quick crop times and only one multi-pellet needed. Can be direct-sown into 4 to 6-in./10 to 15-cm pots or colour bowls. Extend your selling season with this more heat-tolerant, all-lettuce mix. Includes red and green varieties. Formerly Endless Summer Mixture.

Mix Endless Summer, 1000/pack
Item **LET2100** List: \$75.00

Mix Endless Summer, 100/pack
Item **LET2150** List: \$10.00

Mix Wonder Wok

Supplied as multi-species multipellets, with 3 or more seedlings per pellet. Kale Storm Mixture is supplied as Precision Multi-Pellets. The first multi-species multi-seed pellet for salad. Easy to grow with very quick crop times and only one multi-pellet needed. Produces more vivid colours when finished cool. Gardeners will enjoy as both a colourful, mixed-texture ornamental and a delicious, nutritious edible. Performs best for consumers in full sun in cool weather, or partial shade as temperatures warm up. Mix of Asian greens including mustards, kale and bok choy.

Mix Wonder Wok, 1000/pack
Item **LET2200** List: \$75.00

Mix Wonder Wok, 100/pack
Item **LET2250** List: \$10.00

SEED PACKETS

Basil, Packet
Item **BAS1001** Each \$4.50

Basil, 1 Ounce
Item **BAS1000** Each \$9.95

Cucumber, 10 Seeds
Item **CUC1001** Each \$8.00

Lettuce, 100 Seeds
Item **LET2000** Each \$3.60

Micro-Toms, 20 Seeds
Item **TOM3000** Each \$4.00

Pepper, 10 Seeds
Item **PEP1000** Each \$7.00

Tomato, 20 Seeds
Item **TOM2000** Each \$9.95

All Lettuce Seeds are Pelleted.



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High Level of Support and Expertise

One of the biggest advantages of purchasing a hydroponic greenhouse package from CropKing has always been the ongoing technical support that we offer. Our techs keep up to date with the newest products and the best growing methods by testing them first in our research greenhouse. This allows us to make good, practical suggestions to our family of growers.

We offer services that our competition cannot match, from our knowledgeable sales staff to our in-house technical support team with many years of hydroponic growing experience. Our products and competitive pricing create CropKing customers, but our great support keeps bringing them back.

For nearly three decades, we have been the nation's hydroponics leader and have been helping hydroponic growers throughout the U.S. and across the globe to grow premium hydroponic vegetables. CropKing provides everything needed for hydroponic food production; from greenhouse structures, to state of the art growing systems, training, consulting and supplies.



Why Buy Local?

Locally produced vegetables taste better and are fresher than produce which has been shipped for long distances. Today's consumers demand produce that is not only fresh, but also safe and free of pesticides for their family. Hydroponic tomatoes and lettuce, grown locally and without chemical pesticides will meet that demand. Most of our hydroponic growers are delivering their product within a 100 mile radius of their greenhouse. Why are locally grown vegetables more nutritious? Because the average fruit or vegetable at a grocery store may have already traveled more than 1500 miles and lost much of its nutrition along the way.

There are several possibilities for growing and marketing local, hydroponic produce in a greenhouse setting including vine ripened tomatoes, flavorful gourmet lettuce, herbs, and European cucumbers.

Buying local produce helps build communities. You can help ensure that small farms survive in your community and that future generations will have access to nourishing, flavorful and abundant produce by supporting your local farmers.

Hydroponic or Organic

Is There a Difference?

Many individuals believe that hydroponic and organic are the same thing. While there are certain similarities, there are definite differences between the two cultures. Most consumers who purchase organic produce have a high level of concern about their health and want to make sure that they consume produce which is as safe and nutritious as possible.

Small local hydroponic growers are very concerned about having a pesticide free environment inside the greenhouse. Many hydroponic growers use bees for pollination. Any pesticide would kill off the bees who are doing the pollination work in the greenhouse. The biggest difference between a hydroponic grower and an organic grower is they fertilizers that they use. Hydroponic growers used fertilizers that are mined out of the ground and can be dissolved in water. Organic growers use fertilizers that come from a living source such as manure, blood meal or fish emulsion. Whether plants are grown organically or hydroponically, they take in dissolved minerals or "ions" through their root system and convert it through photosynthesis. Whether phosphorus comes from mined rock phosphate or from bat guano, phosphorus is phosphorus. It can only be used by the plant as an "ion" of phosphorus... a charged elemental particle dissolved in water.

Both hydroponic plant growth and organic plant growth are looking for the same results: safe, nutritious vegetables that are not contaminated by pesticides or herbicides. The question becomes how do the two different cultures go about getting their desired results.

Differences Between Hydroponic and Organic Growing:

HYDROPONIC:

1. Hydroponics feed the plants directly.
2. We use clean water.
3. Plants use less energy to find the nutrients as they are dissolved in water that is fed directly to the roots.
4. We are very water conservative and used 1/10 of the amount of water that traditional soil growing uses.
5. Soil quality is not a factor as there is no soil involved.
6. Hydroponic vegetables are grown in a controlled environment.
7. Hydroponic produce is clean as it does not come in contact with soil.

ORGANIC:

1. Organics feeds the soil.
2. Organics uses rain water and other available irrigation water.
3. Plants must spend more of their energy creating root mass to search out the necessary nutrients in the soil.
4. Organic production requires more water because much of it leaches away down into the soil.
5. Soil quality is very important to plant growth.
6. The Organic environment is dependent on the weather (rain, wind storms, etc).
7. Organic produce can have soil or animal residue on it, from the environment and should be washed.

The debate can continue as long as there are farmers, regardless of the growing method. For those of us who do not want to eat vegetables that are coated with pesticides, there are few choices. No matter the growing method, we know that clean food is better food. The search for safe, nutritious food needs to start outside your own front door. The best way to know if "organically grown" produce or any produce is clean and safe, is to know your farmer. We cannot be sure of the safety of either organic or hydroponic vegetables that are grown in foreign countries, and what sprays or contamination may be on them. Buying food from a local farmer is the final answer to eating the best and safest possible produce.

HOW TO USE THIS CATALOG

Our entire product line is organized according to use in this catalog to make it easy to find the items you're looking for. You'll also find an alphabetical index of products on page 71.

A product's item number usually begins with the first three letters of the general name of the product. Some of them may begin with the first three letters of the category name that they would come under. For example, Calcium Nitrate would be found under "Fertilizer", with an item number beginning with the letters "FER".

Please be sure to use the Item Number when ordering. This will enable us to be sure that we're sending you exactly what you want. Also, let us know if you have suggestions for improving our catalog.

PLACING ORDERS

Your customer account number can be found on the left side of an order or invoice.

Occasionally, growers have different ship to addresses. Please specify to the person taking your order which address you wish your order shipped to. If any part of your address is incorrect, please let us know so that we can correct it.

TERMS AND ORDERING INFORMATION

Mailing Address:

CropKing Inc.
134 West Drive
Lodi, Ohio 44254
Phone: 330-302-4203 Fax: 330-302-4204

Hours:

Monday through Friday: 8:00 a.m. to 5:00 p.m. E.S.T.
Customer pick up 8:00 a.m. to 3:30 p.m. E.S.T.

Web Site:

www.cropking.com

E-Mail:

cropking@cropking.com

What About Credit?

We offer a variety of payment options, to allow you to choose the most convenient way to purchase your products. We accept most major credit cards including Visa, MasterCard, Discover, or a program called a Farm Plan. If you'd like to open a Farm Plan account with us, just let us know and we'll be happy to send you an application.

We do not ship COD.

Check Policy:

Unless you are pre-approved for personal checks, your order will be held for ten days before shipping to allow time for the check to clear. If you are in a hurry and need your order shipped immediately, please send a Cashier's or Certified Check or Money Order. There will be a \$20.00 charge for any returned checks.

Minimum Orders:

We have a minimum order policy of \$25.00. Orders less than \$25 will result in a \$5.00 service fee. To avoid this charge, try to plan ahead and order at least \$25 worth of product.

Hazardous Materials:

All hazardous materials ships FEDEX (example, Potassium Nitrate) and are charged an additional fee of \$32.50.

Foreign Shipments:

All foreign shipments are shipped with incoterms of EXW.

Hawaii and Alaska Shipments:

Actual shipping charges will apply along with any special handling charges required.

CPU:

Customer pickup available. **Must call for arrangements.**

Damage and Loss Replacement Policy:

The customer is responsible for inspecting all shipments-either refusing the shipment for damage or making any claims for damage with the carrier. The customer will have to obtain a refund from the trucking company if the customer accepts damaged merchandise.

Be sure to examine your shipment and have the driver note any discrepancies, damage, or appearance of damage or rough handling on the bill of lading.

Returned Merchandise:

No returns will be accepted without prior authorization by CropKing. A restocking charge of 15% may be charged on returns unless there was an error in our shipping or the product was defective. No returns on books, CDs and DVDs.

Prices:

With over 1,500 different products, it is impossible to keep all prices current in a catalog. **All prices are subject to change without notice.** We will use the price that is current at the time of your order, and will try to advise you at the time of order. However, we urge you to confirm prices when you place your order.

Limited Warranty, Disclaimer of Other Warranties:

As to products not manufactured by Seller, Seller shall pass through to Buyer any warranties given by the product manufacturer, to the extent permitted by such manufacturer. In the event of any breach of such warranties, Buyer shall notify Seller within thirty (30) days of receipt of the products. The exclusive remedy for breach of such warranties shall be those remedies provided by the original manufacturer. In no event shall Seller be liable for any damage as a result of such breach.

As to products manufactured by Seller, Seller warrants the Products will conform to the description of the Products on the face hereof, and that such products shall be free from defects in material or workmanship for a period of ninety (90) days from the date of shipment. The Seller shall not be liable for any incidental or consequential damages for any breach of warranty, and Buyer's exclusive remedy shall be limited to repair or replacement of the defective Product, or repayment of the purchase price, as Seller's sole option. Replacement of defective Products or repayment of the purchase price will be made only upon return of the defective Products to Seller, at Buyer's cost. Repair of defective Products shall be done at Seller's location, or at such other place as Seller may direct, with shipping to location at Buyer's cost.

THERE ARE NO OTHER WARRANTIES, EXPRESS OR IMPLIED, AND SELLER EXPRESSLY DISCLAIMS ANY WARRANTY OR MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

Backorders

In the event that an item is currently out of stock, your sales/service representative will notify you. You then have the choice to request:

- The balance of your order can be shipped immediately, and the backordered items shipped when they become available; or,
- CropKing can hold the order until all the items are available, then ship the entire order together.

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