

STURDI-BUILT GREENHOUSE MANUFACTURING has specialized in the design, manufacture, and sale of hobby greenhouses for over 45 years. We have learned that quality accessories play an important role in successful and enjoyable greenhouse gardening. Based on our experience, including the input of our greenhouse customers, we have assembled a line of high quality, dependable accessories. As with our greenhouses, we like to select accessories that are most important in setting up an effective greenhouse. Call us to discuss your specific greenhouse accessory needs.

Ventilation Proper ventilation provides necessary air exchange for plants and helps prevent overheating in the greenhouse. Roof vents are the best method for ventilating residential size greenhouses because they provide natural, gentle venting, quiet operation, and are easily automated. They help preserve humidity in hot weather. Vents in the ends or side walls alone are not adequate but work well in conjunction with roof vents. Exhaust fans are easy and economical to add and easily automated, but tend to dehumidify the greenhouse.

## SOLAR POWERED ROOF VENT CONTROLS

Solar powered vent openers are ideal for roof vents. They automatically adjust ventilation according to temperature. No electricity required. The vent can be set to open between 60° and 75°F. The vent becomes fully open about 20°F above the starting temperature. Operation is completely silent. Designed for hinged vents weighing up to 32 lbs. Cylinder warranty is 2 years. Black wind strap included.

BAYLISS MK7-S.....\$70.00 Replacement power cylinder......\$34.00

## **ROOF VENT SCREEN KIT**



This redwood roof vent screen kit is designed to fit all Sturdi-built greenhouse roof vent openings. Mounted from the inside, it allows vents to operate freely, yet keeps unwanted pests out. Accommodates installed automatic vent controls. Does not work with manual vent openers.

Vent Screen.....\$95.00

CIRCULATION A greenhouse requires interior air circulation. We recommend continuous, 24/7 air movement, in winter to prevent mold and mildew, and in summer to prevent

### WALL MOUNT, THREE SPEED **OSCILLATING FAN**

Quiet, 12" oscillating fan mounts on the wall of your greenhouse. Fan head rotates 90 degrees or can be locked in non-oscillating position. Tilt head to direct gentle air flow up or down. Knob and pull cord for on/off and three speed control. Up to 930 CFM. Motor warranted for 3 years.



12" Oscillating Fan.....\$80.00

AUTOMATIC EXHAUST FAN VENTING SYSTEM This economical fan venting system exhausts warm air from the greenhouse and allows cooler, outside air to flow in through base wall vents or louvered windows. Disadvantages to exhaust fans are that they can be noisy (a speed control can help) and they can dehumidify the greenhouse. (See Humidifying Equipment) System includes a shuttered fan (to be mounted in one end of your greenhouse), an air intake shutter (mounted in the other end), and a thermostat for automatic control. Starting temperature range is 30° to 90°F. For approximate CFM requirement, divide total greenhouse cubic foot volume by 1.5. For larger greenhouses, consider two or more fans. NOTE: for fans and shutters, frame square opening 1/2" larger than fan size. For Sturdi-built greenhouse customers, redwood mounting frames are furnished without extra charge.





## SHUTTER MOTOR

Add this to your air intake shutter. Opens the shutter when the fan clicks on. Relieves the starting load on the fan. Holds the shutter firmly closed during the winter.

**Optional Shutter Motor....\$140.00** 





## JALOUSIE LOUVERED WINDOW

This factory assembled window installs easily in greenhouse end walls. Provides extra ventilation. Works best in conjunction with roof vents. 20" W x 30"H. Includes screen and acrylic "storm widow"

Jalousie Window......\$200.00

## JALOUSIE WINDOW KIT FOR DOOR

Replaces glazing in the upper part of your greenhouse door. Helps provide extra summer venting without having to open the door. Can be installed in existing greenhouse doors. (Specify net opening when ordering.)



JWD.....\$200.00

#### Stock No. CFM **Fan/Size** Price 2C819 520 10" \$340.00 2C710 650 12" 2C713 870 16"

## VARIABLE FAN SPEED CONTROL

Allows you to adjust fan speed to accommodate changing seasons (slower speed during cooler weather, faster in summer) and for other requirements such as slowing the fan to make it quieter.



\$365.00

\$445.00

## 4C331 Fan Speed Control, 3 amp....\$35.00

**PROPAGATION** With good bottom heat, propagation is easy and fast. Propagation mats are great for supplying heat to plants in containers, seed flats, etc. Mats controlled with adjustable thermostats will provide better performance than those with preset (fixed temperature) thermostats. Soil cables are another means of supplying heat to soil benches. The cable length required will depend on the size of the bed to be heated and whether the bed is in a heated greenhouse. For large beds, consider two or more soil cables.

## SUPER SPROUTER SEEDLING HEAT MAT

Warms root area approximately 10°-20°F over ambient temperature to improve germination process for seeds anad cuttings. Heavy-duty construction makes these mats very durable. Small mat holds 1 standard 10''x20'' propagation tray. Larger mat holds 2 trays, end-to-end. Larger mat can be daisy-chained together

726695 Size:10"x21", 20 watts....\$25 726685 Size:12"x48", 60 watts....\$49



# 2 tray size



Inexpensive, fully automatic cables for easy control of soil temperature. Cable should be buried in your soil per the directions in the package. Comes with built-in thermostat preset to 70°F. Ready to plug into any 120 volt outlet. All cables listed are rated at less than 4 amps.

Stock No.	Length	Area to heat	Watts	Price
51024	24'	6 sq. ft.	84	\$35.00
51036	36'	9 sq. ft.	126	\$40.00
51048	48'	12 sq.ft.	168	\$45.00

## LOW WATT PROPAGATION MATS

An economical way to germinate seeds and propagate cuttings. Less than 12 watts electric power per square foot. Uniform heat distribution because it is a continuous sheet heater, not coiled wires embedded in a mat.



Separate thermostat is required for operation. One year limited warranty.

OP-27 mat, 22" x 14", 25 watts......\$37.00 OP-55 mat, 22" x 22", 45 watts.....\$47.00 OP-110 mat, 22" x 44", 90 watts.....\$78.00

## PROPAGATION MAT THERMOSTAT

Quick and easy to use. Simply plug the propagation mat's cord into the slot and put the temperature probe into the soil. Use the dial to set temperature.



726702 Heat Mat Thermostat......\$35.00

The most referred-to instrument in any

greenhouse. An old fashioned analog

thermometer that shows high and low

you select, and, of course, shows current

temperature. Simple push button reset.

Min-Max Thermometer.....\$24.00

temperature extremes over any period of time

MINIMUM-MAXIMUM THERMOMETER

# INSTRUMENTS

## THERMOMETER WITH INDOOR HUMIDITY



Displays indoor or outdoor temperature & indoor humidity with large 1<sup>1</sup>/s" tall numbers. Memory function stores minimum & maximum temperature and humidity readings. Uses 1 AAA battery (not included). Ten foot long

weatherproof sensor wire for outdoor temperature. 716542 Digital Thermometer...\$26.00

## WIRELESS, REMOTE SENSING THERMOMETER-HYGROMETER

This system monitors and displays digital indoor and outdoor temperatures and relative humidity. One remote sensor is included. Put a remote sensor in your greenhouse and the base station in your house. Expandable to 3 remote sensors. Wireless, simple to set up. Displays degrees in F or C. Base station,1 remote sensor and batteries included. 50 ft range. Large digital readout.

716555 Wireless Themometer/Hygrometer....\$44.00 716557 Additional sensors ......\$22.00





## HUMIDISTAT

Controls humidity systems according to humidity level. Simply plug device into pre-wired cord receptacle. Operating range is 20% to 80% relative humidity. 120 volt. 7.5 amp rating. **82-1A Humidistat....\$85.00** 

**HEATING** There are several ways to heat a greenhouse.such as electric, natural gas, and L.P. Electric heaters are volt and are available with moisture resistant thermostats. Ordinary thermostats found in cheaper 240 volt heaters and most 120 volt heaters can't handle humid greenhouse conditions. A 120 volt heater is generally adequate for heating a small greenhouse but should be controlled by a separate heavy duty, moisture resistant thermostat. Portable heaters should be removed from the greenhouse during the non-heating season. Natural Gas and LP gas heaters are available for greenhouse use. They should be properly vented and equipped with a good thermostat. They are useful for heating larger greenhouses and often have the ability to heat even when there is no power.

## **EMPIRE DIRECT VENT GAS HEATERS**



Very suitable for greenhouse heating. Fully automaticthermostat included. Non-Electric. Heats even if power is lost. Dependable pilot light ignition system. Space saving wall mount design. Vents through wall. Available for Natural Gas or L.P. (Please specify when ordering.)

Model BTU Output Dimensions Price WxHxD

 DV-210
 7,000
 16¼"x 21¾" x 9¾"
 \$685.00

 DV-215
 10,500
 20¼"x 24½" x 9¾"
 \$765.00

 DV-25
 17,500
 37" x 27¾" x 11½"
 \$925.00

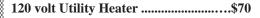
 DV-35
 24,500
 37" x 27¾" x 11½"
 \$995.00

Optional thermostat may be used for better temperature control. See W/R Millivolt setback on page 5.



## UTILITY HEATER (120V)

For heating the small greenhouse. Durable metal casing, painted beige. Built in thermostat for automatic operation. Two heat output settings - 750 & 1500 watts-plus fan only. 5100 BTU's maximum. Tip over switch and safety cut off if it gets too hot. 6' heavy duty grounded cord. Add our heavy duty thermostat for more precise temperature control. See page 5.



## KING 240V ELECTRIC HEATER

A rugged heater that moves air efficiently. Has a cast iron motor, aluminum fan blade and built-in thermostat. Automatic shut off in case of over heating. Durable finish in almond color. Available with 3800W (20amp) or 4750W (30amp) versions. Please specify when ordering.



KBP2406 King heater, 3800W or 4750W......\$460

## EVAPORATIVE AIR COOLERS

An efficient means of cooling is through evaporation. Evaporative coolers draw hot air through wet pads. Water evaporates from the pads, supplying cool, clean, humid air to your greenhouse.

These coolers are installed just outside the greenhouse. Cool air is ducted in through an opening framed in the base wall or greenhouse wall. Attractive, adjustable, interior grille (plastic or metal depending on model). Durable finish combines the strength of metal with an epoxy coating.



EWCM 28 - 2 speed, 2800 CFM......\$575.00 EWC 35 - 2 speed, 3300 CFM......\$705.00 EWC 44 - 2 speed, 4000 CFM.....\$784.00 EWC 50 - 2 speed, 4700 CFM.....\$890.00 W/R 1687-C Cooling Thermostat with pre-wired cord..\$80.00

## SOUTHERN BURNER GAS HEATERS NON-VENTED GAS HEATER

- ♦ Non-electric, Fully Automatic
- ♦ No Venting Required
- ♦ Adds CO2 While it Heats
- ◆ 17,500 BTU output

Will fit under standard benches, only 22' high. Use one or more units depending on your greenhouse size. Comes with a wall mount millivolt thermostat. *Specify LP or Natural Gas* Model C-1 MV......\$470.00



THERMOS	STATS High	quality moisture resistant thermos	stats should be us	ed in a humid	greenhouse	. Thermo	ostats should control a
wide temperature dif	ferential, turning t	he heat on at a set temperature a	nd turning off 4°to	30° higher (or	the reverse	for cooli	ing thermostats).
THERMOSTA	AT FOR HEA	ATING OR COOLING C	ONTROL	8	1		1
<ul> <li>THERMOSTAT FOR HEATING OR COOLING CONTROL</li> <li>No finer thermostat for greenhouse heating or cooling control.</li> <li>Moisture-resistant, hydraulic type control with -30° to 90°F emperature range and 5° to 40°F adjustable differential.</li> <li>Energy efficient. Great for the smaller 120V heaters because it allows for precise temperature control.</li> <li>Mount thermostat in any convenient location with temperature sensor up to 8ft. away.</li> <li>Can be direct wired or add a pre-wired cord for plug-in 120V apliances.</li> <li>This thermostat works for either heating or cooling but it must be wired for the particular use by us (the factory installed prewired cord) or by your electrician. Please specify when ordering.</li> <li>W/R 1687-9 Heating/cooling thermostat\$65.00</li> </ul>							
W/R 1687-9P He	ating/Cooling T	<u>Chermostat with pre-wired co</u>					
Still	di	built	ACCES	SORI	<u>ES OI</u>	RDE	ER FORM
GREENHO	USE MANU	FACTURING CO.		Shippin	g and F	land	ing Charges
		sa or Mastercard and order by	phone	Order To	tal	Add	
```	/	n Portland) or (800) 334-4115 am to 5pm, Pacific Coast Time		\$0-\$40.00		\$10.00	)
		and to Spin, Factor Coast Time at any of these accessories		\$40.01-\$80	0.00 \$12.00		)
♦ Form may be fax	ed at any time to	(503)293-9266		\$80.01-\$12	20.00 \$15.00		)
		rking days for in stock items. size or weight dictate other mean	s.	\$120.02-\$14	\$20.00		)
♦ Returns are subj	ect to prior appro	oval and a 15% restocking charg		Over \$150.0	00 add \$15% of order		
<ul> <li>Alaska, Hawaii an</li> <li>Extra shipping cl</li> </ul>		tomers call for shipping rates.		Express Shi	ipping Avail	lable-ca	ll for rates
		terms subject to change without	notice				
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City			City				
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<b>To charge on yo</b> Please print legibly	our credit car	d (Circle One): VI	SA	Maste	ercard		
Card No.:				Expir	es		
Signature:							

HUMIDITY & WATERING Every greenhouse needs water, usually a spigot with a coil hose and watering wand is sufficient. Beyond that, your needs will vary with the plants you are growing. We offer some parts to create an individualized water/misting system. They are designed to go on PVC pipe that is more cost effective to buy at your local home improvement center. Proper humidity is important for your plants and needs vary as seasons change. Warm, sunny weather requires higher relative humidity while cold, cloudy weather needs lower relative humidity. Often, simply wetting down the greenhouse floor periodically is often all that is needed to maintain adequate humidity. However, if additional humidity is needed consider adding humidifying equipment. Systems may be automated for greater convenience.

**OREGON MISTER FOGGER** 

approx. 1 gallon per hour (rate varies with

automated with a humidistat. Blower speed

is adjustable. The system can be set up to

together or you can leave the blower

with the mister turning on and off as

humidity is needed. Comes with 1/4"

water supply tube and saddle valve for

easy installation. Requires 120V power

running for full time circulation,

have the mister and blower turn off and on

water pressure). Mist is circulated with

a powerful, quiet blower. The system is

This misting/fogging system is ideal for the small greenhouse.

A high quality brass nozzle delivers fine mist at a rate of



#### **COMBINATION WATERING WAND** & RECOIL HOSE

Quality chrome-plated watering/misting wand with easy on/off thumb trigger. The aerator head dissipates pressure to allow a full flow of water without the normal hard force. Comes with an

interchangeable Mist Spray head perfect when fog or mist is desired. Available in 14" or 24" lengths. Pair either wand with a 25ft. Recoil hose. This lightweight, durable, easy-to-use hose has a ¼" ID and all-brass garden hose fittings. Hose coils and stores like a telephone cord. Swivel fittings on both ends prevent twisting and kinking Perfect for greenhouse use.

Fogg-it 14" Watering/Misting Wand\$20.00	& water. A great system for creating a
Fogg-it 24" Watering/Misting Wand\$25.0025 ft. Recoil Hose\$40.00	tropical growing environment. Made exclusively by Sturdi-built.
Books we recommend	<sup>*</sup> Mister/Fogger\$450.00
Unable to compete with online sellers on price we don't carry books anymore.Here are a few we recommend for greenhouse gardening.	FLORA-MIST FOGGING/MISTING NOZZLES
◆ All About Greenhouses From Ortho Describes how to select, plan, buy or build, equip and use your greenhouse	A quality, inexpensive nozzle. Screws into an <sup>1</sup> / <sub>8</sub> " pipe threaded opening or fitting. Available in 3 sizes. Covers
<ul> <li>Greenhouse Gardener's Companion by Shane Smith Everything you need to know about setting up a healthy growing environment in the greenhouse</li> </ul>	4' to 6' diameter depending on water pressure.
The New Seed Starter Handbook by Nancy Bubel Complete guide to starting plants from seed including when to start, how deep to plant, water needs, light, etc.	
<ul> <li>♦ My Greenhouse Journal by Greta Heinen         Designed to be a two year record of greenhouse activities     </li> <li>♦ Your First Orchids and How to Grow them</li> </ul>	Stock No.         Orifice Size         GPH         Price           FM020         .020         4         \$5.00           FM032         .032         8½         \$5.00
A basic orchid book from the Oregon Orchid Society.	



We still have a few available for \$7.50 each.	
	e shading. During sunny weather greenhouse plants must be
protected from sunburn and overheating. Our shade cloth is your greenhouse. If you have a greenhouse other than a Stu	<b>o o o</b>



Made of long lasting polypropylene, shading cloth provides flexible, economical protection from hose hot summer days. Easy to attach over the greenhouse roof and/or walls. Available in custom sizes, 3' to 20' wide up to 30' long. All edges are factory hemmed

and grommeted (approx. 2' on center) for easy installation. Specify size when ordering.

	Stock No.	Shade	<b>Density Price*</b>		
	<b>CSC-47</b>	47%	\$0.80/sq.ft.		
	<b>CSC-55</b>	55%	\$0.85/sq. ft.		
Z	<b>CSC-63</b>	63%	\$0.90/sq. ft.		
	<b>CSC-73</b>	73%	\$0.95/sq. ft.		
	<b>CSC-80</b>	80%	\$1.00/sq. ft.		
*Approximate cost for rectangular pieces. Custom size extra.					



Sturdi-Built Greenhouse Mfg. Co. 11304 SW Boones Ferry Rd., Portland, OR 97219 www.sturdi-built.com (800)334-4115 (503) 244-4100

#### **BENCHES & SHELVES** Create an arrangement to suit your specific needs NOTE: DUE TO SIZE & WEIGHT, EXTRA SHIPPING CHARGES WILL APPLY TO BENCHES

## STURDI-BUILT STANDARD BENCHES

Made of all Heart construction grade Redwood or select Western Red Cedar. Easy to install. Come ready for you to assemble and complete with galvanized metal legs. Standard benches are available in 3 types:

*Soil Type* (for propagating) - extra deep 8" sides, 1" bottom

boards.



Slat Bench

*Slat Type* - narrow spaced boards. Strong, good for potted plants.

Combination - part slat, part soil (you specify split)



PRICE PER BENCH

Width	6'	8'	10'	12'
27½"	\$185	\$210	\$284	\$327
32"	206	233	315	365
37"	227	256	346	400

Note: Number & width of benches depends on greenhouse model. Shorter and longer lengths are available. Call for prices.

## SLAT BENCH COVERS FOR SOIL BENCHES



Make your bench space more versatile with these soil bench tops. When your soil bench is not being used. convert it to a slat bench with these panels. 3 pieces will cover a 6'-6" long soil bench.

Custom sizes are available.

26" panel for 27" wide bench.....\$36.00 26" panel for 32" wide bench.....\$41.00 26" panel for 37" wide bench .....\$46.00

## WOOD SHELVES

Beautiful wood shelves and supports made of top quality redwood or cedar. Attractive and strong. Will fit any Sturdi-built greenhouse. Shelves are 11" wide and extend wider than the bay by 9" on each side. Please



specify the greenhouse model when ordering and whether for side wall or end wall.

Note: shelves cannot be full length of the greenhouse, they must stop at least one bay from the corner.

One standard bay length (approx. 40")...\$35.00 Each additional bay length.....\$25.00

## SPECIAL ALL-WOOD BENCHES

Available in one or two levels in a wide variety of sizes. Can be custom made for your greenhouse. Come rea

eady for you to ass	emble.			
Length	6'	8'	10'	12'
27" wide single	\$232	\$263	\$355	\$410
27"wide double	347	393	532	615
32"wide single	257	291	393	456
32"wide double	386	437	590	685
36"wide single	283	320	433	500
36"wide double	425	<b>480</b>	649	750

Shorter and longer lengths available. Call for prices.



Dress up your greenhouse with our handmade ridge scallop and finials. A nice addition to any freestanding greenhouse and a great look for your garden! Shown is our basic finial style. Each is individually made so inventory varies slightly. Ridge Scallop......\$13/ft Finial with Base.....\$175 each





#### SUPPLEMENTAL GREENHOUSE LIGHTING Plants need light for proper growth. The light spectrum range produced by High Intensity Discharge (H.I.D.) light enhances natural light. The result, with the proper nutrients, is healthier seed starts, more flowers and vigorous plants. H.I.D. lights are especially useful during long winters with little sunlight - at a cost comparable to using one of your kitchen appliances.

Types of lights: Fluorescents: efficient T5 technology linear fluorescent fixtures put out 92.6 lumens per watt, far more than traditional fluorescent bulbs. T5s are excellent for starting seeds and cuttings, but also produce enough light for full term growth. Cool burning, they can be placed very close to your plants. Metal Halide lamps emit a light spectrum which appears blue-white to the human eye, a spectrum conducive for vegetative growth or starting seeds. High Pressure Sodium lamps emit a spectrum concentrated in red/orange light, ideal for the fruiting and flowering stage of plant development. A good multi-purpose light as well.

On average, a light system will increase your electricity cost from \$10 to \$30 per month, depending on the size of the system, hours operated and your cost of electricity. The lights we sell are energy efficient, offering huge amounts of light and growing power for your money. *Important*: make sure your circuit can handle the power draw. Do not exceed 75% of the breaker's rated ability.

Sturdi-built offers complete, ready to use lighting systems, including lamps, designed for you to hang, plug in and turn on. If you need a more custom solution with higher power options call us.

## Sun Blaze T5 High Output Fluorescent Fixture



- ♦ 95% reflective Aluminum reflector- Light output is 300% higher than a lamp with no reflector
- ◆ 12 ft power cord; May be daisy chained together
- ♦ 5 year factory warranty on fixture
- Wire cable hangers-can hang vertically or horizontally
- ♦ Comes standard with Spectralux 6500°K (blue)lamps. 3000°K (red) lamps may be purchased separately.

Sun Blaze T5-22	2ft-2 lamp	\$105
Sun Blaze T5-24	2ft-4 lamp	\$140
Sun Blaze T5-42	4ft-2 lamp	\$135
Sun Blaze T5-44	4ft-4 lamp	\$180
-Also available in	8 hulh widths	Call for r

Also available in 8 bulb widths. Call for prices

Optional "red" Spectralux lamps: \$8.00ea -2ft, \$12.00ea - 4ft.

## Sun System Digital

Extremely versatile system!!250 or 400 watt...MH or HPS.

State of the art digital fixture can run either 250 and 400 watt lamps.

- Allows operation of either metal
- halide or high pressure sodium lamp. ♦ 95% reflective aluminum interior
- ♦ 8ft grounded 120V power cord
- Chrome wire mounting hangers
- ♦ 5 year warranty (3 yr.full, 2 yr. pro rated)
- ♦ Attractive and durable powder coated steel housing.

## Sun System HPS 150

Compact, easy to use light fixture.

- ♦ 150 watt high pressure sodium bulb included-delivers 16,000 lumens.
- ♦ Highly reflective aluminum interior
- ◆ 7ft grounded 120V power cord
- Chrome wire mounting hangers
- ◆ 22½"L x 12¾"W x 7½"H
- ♦ 2 year warranty

Fixture cost (without lamps): \$ 250 **250 Watt Metal Halide lamp** \$20 250 Watt High Pressure Sodium \$30 400 Watt Metal Halide \$20 400 Watt High Pressure Sodium \$30

Sun System HPS 150 ......\$100 **Replacement lamps:** 150W High Pressure Sodium \$19

# LIGHTING TIMERS

Sum Section

## DIGITAL, TWO OUTLET, **24 HOUR TIMER**

Dual timer, 1 minute intervals, up to 8 separate schedules, large digital display, 15 amp capacity, battery backup, easy to use. 734105 Digital timer.....\$24.00



## ANALOG, TWO OUTLET, **24 HOUR TIMER**

Dual timer, easy to use, large display 15 minute intervals, rated at 15 amps which works for 2 400 watt lights. 734100 Manual timer.....\$19.00