sturdi·built
GREENHOUSE MANUFACTURING CO.

GREENHOUSE ACCESSORIES

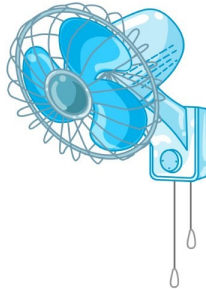Sturdi-Built Greenhouse Mfg. Co., 11304 SW Boones Ferry Rd., Portland, OR 97219

Sturdi-Built.com

Sturdi-Built Greenhouse Manufacturing Co. has specialized in residential greenhouses for over 60 years. Quality accessories play an important role in successful and enjoyable greenhouse gardening. With the input of our customers, we have assembled high-quality, dependable accessories that are important to set up an effective greenhouse. Call us to discuss your specific greenhouse needs.

We reserve the right to change our prices at any time and to substitute any accessory of equal or greater quality in the event that the original accessory is not available.

Ventilation and Circulation - Page 3

Proper ventilation provides air exchange for plants and helps prevent greenhouse overheating. Roof vents are best for ventilating residential size greenhouses because they provide natural, gentle venting, quiet operation and are automated. Vents in the end or side walls alone are not enough, but work well with roof vents. Exhaust fans are easy to add and automate, but tend to dehumidify a greenhouse. A greenhouse also requires interior air circulation. We recommend continuous, 24/7 air movement—in winter to prevent mold and mildew, and in summer to prevent excessive heat build-up.

Propagation - Page 4

With good bottom heat, propagation is easy and fast. Heat mats are great for supplying heat to plants in containers, seed flats, etc. Soil warming cables are another means of supplying heat to soil.

Heating and Cooling - Page 5

Heat a greenhouse with electric, natural gas or LP. Electric heaters are easy to install and require no venting. 240 volt heaters are more efficient than 120 volt and are available with moisture resistant thermostats. Thermostats found in cheaper 240 volt heaters and most 120 volt heaters can't handle humid greenhouse conditions. A 120 volt heater usually can heat a small greenhouse but should have a separate heavy duty, moisture resistant thermostat.
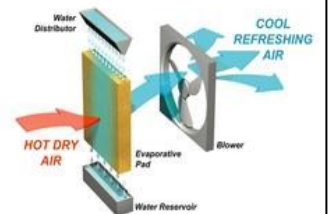
Natural Gas and LP gas heaters are available for larger greenhouses and often can heat even when there is no power. They should be properly vented and equipped with an accurate thermostat.

Evaporative Air Coolers - Page 5

Cooling through evaporation is efficient. Evaporative coolers draw hot air through wet pads. Water evaporates from the pads, supplying cool, humid air to your greenhouse.

How EVAPORATIVE COOLING works

Instruments - Page 4

Instruments such as a thermometers, hygrometers and moisture-resistant thermostats should be used in a greenhouse. Thermostats should control a wide temperature differential, turning the heat on at a set temperature and turning off 4°to 30° higher (or the reverse for cooling thermostats).

Humidity and Watering - Page 6

Every greenhouse needs water. Usually a spigot with a coil hose and watering wand is sufficient, but needs will vary with the plants you are growing. Humidity is important for your plants and varies as seasons change. Warm weather requires higher relative humidity while cold weather needs lower relative humidity. Often, simply wetting the greenhouse floor periodically is all that is needed to maintain adequate humidity. If additional humidity is needed, consider adding humidifying equipment.
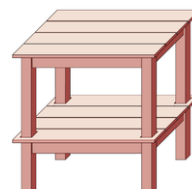
Shade Cloth - Page 6

Adequate shading is important. During sunny weather, greenhouse plants must be protected from sunburn and overheating. Our shade cloth is hemmed with grommets, designed to go on the outside of your greenhouse.

Lighting and Timers - Page 7

Sturdi-Built offers complete, ready to use lighting systems, including lamps designed for you to hang, plug in and turn on.

Benches and Shelves - Page 8

Create an arrangement of benches and shelves that will function perfectly for your needs.

AUTOMATIC ROOF VENT OPENERS

Passive solar vent openers are ideal for roof vents. They automatically adjust ventilation according to temperature. No electricity required. The vent starts to open between 60° - 75°F and is fully open about 20°F above the starting temperature. Operation is completely silent. Designed for hinged vents weighing up to 32 lbs. Power tube warranty is 2 years. One black wind strap included.

BAYLISS MK7–S . . . $88
BAYLISS MK7–S Triple Spring . . . $95
Replacement Power Tube . . . $40
Additional Wind Strap for Windy Conditions . . . $10

ROOF VENT SCREEN KIT

Keep unwanted pests out of your greenhouse with a roof vent screen kit. This kit is designed to fit all Sturdi-Built greenhouse roof vent openings. Mounted from the inside, it allows vents to operate freely. Accommodates installed automatic vent openers.

Roof Vent Screen Kit . . . $180

JALOUSIE WINDOW KIT

This louvered window installs easily in greenhouse walls. Provides extra ventilation. Works best in conjunction with roof vents. Includes screen.

Jalousie Window Kit . . . $265

JALOUSIE WINDOW KIT FOR DOOR

Installs in the upper part of your greenhouse door. Provides extra venting without having to open the door. Can be installed in existing greenhouse doors.
Specify door size when ordering.

Jalousie Window Kit for Doors . . . $280

WALL MOUNT, THREE SPEED OSCILLATING FANS

These quiet oscillating fans mount on your greenhouse wall. Fan rotates 90° or can be locked in position. Tilt head to direct air flow up or down. Three speeds. Motor warrantied for 1 year. 120V.

12" Oscillating Fan . . . $90
14" Oscillating Fan . . . $140
16" Oscillating Fan . . . $190

AUTOMATIC EXHAUST FAN VENTING SYSTEM

Vent warm air from your greenhouse to pull in cooler, outside air. 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. 120VAC.

For approximate CFM requirement, divide total greenhouse cubic foot volume by 1.5. For larger greenhouses, consider two or more fans. For fans and shutters, frame square opening ½" larger than fan size. For Sturdi-Built greenhouse customers, redwood mounting frames are included.

FAN   INTAKE SHUTTER   THERMOSTAT

Fan/Size	CFM	Price w/ No Intake Shutter	Price w/ Intake Shutter
10"	520	$550	$620
12"	650	$590	$670
16"	870	$780	$880

Variable Fan Speed Control, 3 AMP . . . $52

Use this variable fan speed control in conjunction with your exhaust fan system to control the humidity levels in your greenhouse.

PROPAGATION

SEEDLING HEATING MAT

Warms root area approximately 10° to 20°F over ambient temperature to improve germination for seeds and cuttings. Durable, heavy-duty mats. Small mat holds one standard 10"x20" propagation tray. Largest mat holds four trays, end-to-end.

Single Tray

Size: 10"x21", one tray . . . $25

Size: 12"x48", two tray . . . $95

Two Tray

Size: 21"x48", four tray . . . $100

Heat Mat Thermostat . . . $90

FLEX AEROPONIC TOWER GARDEN

Comes with all you need to grow vegetables, herbs, fruits and flowers aeroponically inside or outside your greenhouse. Enough growing space for 20 full-sized plants. Includes Tower Garden, pump, timer, seeds, germination tray, mineral blend, rockwool cubes and pH test kit. Dimensions: 62" x 30" x 30"

Includes one year warranty on all components.

FLEX Tower Garden . . . $670

Optional Light Kit . . . $325

THERMOSTATS

THERMOSTAT FOR HEATING OR COOLING CONTROL

Moisture-resistant, hydraulic type control with -30° to 90°F temperature range and 5° to 40°F adjustable differential.

♦ Mount thermostat in any convenient location with temperature sensor up to 8 feet away

♦ Can be direct wired or add a pre-wired cord for plug-in 120V appliances

Note: Must be wired for either heating or cooling by us or by your electrician. Please specify heating or cooling.

Heating/Cooling Thermostat . . . $150

Heating/Cooling Thermostat with pre-wired cord (120V only) . . . $175

THERMOMETER WITH INDOOR HUMIDITY

Displays indoor or outdoor temperature & indoor humidity with large 1 ⅛" tall numbers. Memory stores minimum & maximum temperature and humidity readings. Includes 1 AAA battery. Ten foot long weatherproof sensor wire for outdoor temperature.

Digital Thermometer . . . $25

THERMOPRO WIRELESS, REMOTE SENSING THERMOMETER-HYGROMETER (TP63A)

Monitors and displays digital indoor and outdoor temperatures, and relative humidity. Includes base station and one remote sensor. Put a remote sensor in your greenhouse and the base station in your house. Uses a cold-resistant rechargeable lithium battery. Wireless, simple to set up. Displays degrees in F or C. 200 foot range. Large digital LCD readout. Supports multiple sensors.

Wireless Thermometer/Hygrometer with remote sensor . . . $32

THERMOPRO BLUETOOTH WIRELESS THERMOMETER-HYRGROMETER (TP60)

Conveniently monitor indoor and outdoor temperatures and relative humidity with ThermoPro Sensor app. 260 foot Bluetooth range to send data directly to your phone. Set preset temp and humidity ranges; the app will immediately notify you if your temp or humidity falls out of the set range. Comes with easy-to-read 3.5" touch-sensitive LCD display. Uses two AAA batteries (included). Supports multiple sensors.

Bluetooth Wireless Thermometer/Hygrometer . . . $20

ELECTRIC HEATERS

120V Bio Green Palma Heater . . . $180

Splash proof, includes digital thermostat, 2,000W heating output, 95 CFM air circulation. Economical to operate. Suitable for smaller greenhouses.

Bio Green Palma

240V Bio Green Phoenix Heater . . . $320

Splash proof, 2,800W heating output. 270 CFM air circulation. Comes with built-in thermostat. Designed to be floor-standing or hanging. Fan setting perfect for increased circulation in summer months. Suitable for medium-sized greenhouses.

Bio Green Phoenix

240V King Heater, 3,800W or 4,750W . . . $650

A rugged heater that moves air efficiently. Has a cast iron motor, aluminum fan blade and built-in thermostat. Automatic shutoff in case of overheating. Durable finish. Available with 3,800W (20amp) or 4,750W (30amp) versions. Please specify when ordering. Suitable for medium-sized greenhouses.

King 240V

EMPIRE DIRECT VENT GAS HEATERS

Great for larger greenhouse heating. Non-Electric; heats even if power is lost. Dependable pilot light ignition system. Space saving wall mount design. Vents through wall.

Specify LP or Natural Gas

Model	BTU Output	Dimensions WxHxD	Price
DV-210	7,000	16 ¼"x 21 ⅜" x 9 ⅜"	$960
DV-215	10,500	20¼"x 24 ⅞" x 9 ⅜"	$1,060
DV-25	17,500	37" x 27¾" x 11½"	$1,260
DV-35	24,500	37" x 27¾" x 11½"	$1,360

Optional thermostat may be used for better temperature control in DV-210 and DV-215. DV-25 and DV-35 come with built-in thermostats.

Thermostat for DV-210/DV-215 . . . $35

EVAPORATIVE AIR COOLERS

Add humidity to your green-house. 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.

Covers (sq ft)	Airflow	HP	Price
400 to 600	2,800 cfm	1/8	$1,000
600 to 1,400	3,800 cfm	1/3	$1,100
1,400	4,200 cfm	1/3	$1,700
1,200 to 1,600	4,700 cfm	1/2	$1,800

Cooling Thermostat with pre-wired cord . . . $175

WATERING WAND & RECOIL HOSE

Watering and misting wand with slip resistant handle and easy on/off hand trigger. The 16" wand's nozzle has 8 adjustable watering patterns: jet, angled, full, soaker, mist, flat, cone and shower. 24" wand's shower head has 660 holes, perfect for delicate seedbeds and flowerbeds. Includes a 25 ft. recoil hose for easy storage. Hose has all-brass garden hose fittings. Lightweight, durable and easy-to-use. Swivel fittings on both ends prevent twisting and kinking. Perfect for garden and greenhouse use.

16" Wand

24" Wand

16" Watering Wand w/ 25 ft. Recoil Hose. . . $75

24" Watering Wand w/ 25 ft. Recoil Hose. . . $85

GREENHOUSE SHADE CLOTH

Made of long lasting polypropylene, shade cloth provides flexible, economical protection during hot, sunny 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 for easy installation and seasonal removal. Specify size when ordering.

Shade Density	Price*
47%	$1.10/sq. ft.
55%	$1.15/sq. ft.
63%	$1.25/sq. ft.
73%	$1.35/sq. ft.
80%	$1.80/sq. ft.

*Approximate square foot cost for rectangular pieces. Custom sizes & shapes extra. There is a $50 minimum order for shade cloth.
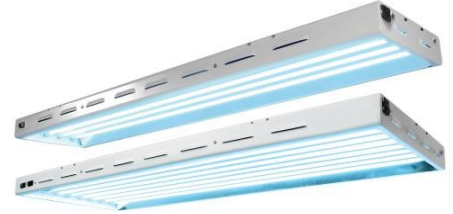
SUPPLEMENTAL GREENHOUSE LIGHTING

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, please call us.

Sun Blaze T5 High Output Fluorescent Fixture

High Output T5 fluorescent fixtures put out 92.6 lumens per watt, far more than traditional fluorescent bulbs. T5s are excellent for starting seeds, cuttings and full term growth. Available in blue and red spectrums. Cool burning, they can be placed close to plants.

♦ 95% reflective aluminum reflector– light output is 300% higher than a lamp with no reflector
♦ 12 ft power cord; Fixtures 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)
♦ *Also available in 8-bulb widths (call for prices)*

Sun Blaze T5-22	2ft-2 lamp	$140
Sun Blaze T5-24	2ft-4 lamp	$160
Sun Blaze T5-42	4ft-2 lamp	$195
Sun Blaze T5-44	4ft-4 lamp	$260

- Optional "red" Spectralux lamps: $8 ea. -2ft, $12 ea. - 4ft.
- Optional T5 White 5,500°K 4ft White LED replaces T5 fluorescent bulbs - $35.00

SolarSystem 275 by California Lightworks - 200 Watt LED Grow Light

LED (Light Emitting Diode) technology can outperform traditional grow lights. LED grow lights target the correct parts of the light spectrum at the right intensity, targeting the light spectrum where absorption by plants is highest. We recommend the SolarSystem 275 as a good all-purpose light with spectrums to encourage both vegetative growth and flowers. The light it emits is a pink/purple color. Consumes up to 200 Watts. Lights a 5' x 5' vegetative area and 3' x 3' bloom area. California Lightworks designs and manufactures products in the USA.

SolarSystem 275 . . . $389

SolarXtreme 500 by California Lightworks - 200-800 Watt LED Grow Light

Features CA Lightwork's exclusive Optigrow® light spectrum which offers the best results for all phases of growth in a single fixture. Optigrow® has been specially formulated and tested to give the best results in while offering full power for bloom and high yields. Consumes from 200 to 800 watts. Covers a 4 x 4 foot area.

SolarXtreme 500 . . . $400

SolarSystem 550 by California Lightworks - 0-400 Watt LED Grow Light

The SolarSystem 550 LED grow light system offers programmable spectrum control over multiple wavelengths. It operates at a frequency of 50-60 Hz and draws a maximum current of 3.3A @ 120 V, 1.65 A @ 240 V. Power consumption ranges from 0-400 W. Covers bloom area of 4' x 4' and a vegetative coverage of 6' x 6'. Perfect as a single light or use several lights to cover a larger area underneath benches.

SolarSystem 550 . . . $650

SolarSystem 1100 by California Lightworks - 0-800 Watt LED Grow Light

Lightweight and powerful, the SolarSystem 1100 is capable of replacing a 1000 watt HPS system. Can be used for veg or bloom. Fully programmable spectrum control. Covers a 5' x 5' bloom area or an 8' x 8' vegetative area.

SolarSystem 1100 . . . $1,274

ALL-WOOD BENCHES

These all-wood benches are built to your needs and provided ready for you to assemble. Easy to install. Available 18", 32", 36" high. Made with construction grade Clear All-Heart Redwood.

	Width	Up to 6' long	Between 6' and 8' Long
1-Tier	**24" & 27"**	$300	$360
	32"	$330	$400
	36"	$340	$420
2-Tier	**24" & 27"**	$390	$480
	32"	$460	$570
	36"	$480	$580

When ordering benches...

- Custom bench lengths are available
- Design combination benches - part slat, part soil
- Place benches inside or outside of your greenhouse
- Use Soil Bench Tops as covers for your soil bench for potting or to extend your bench top area
- Add a drop-in sink in your greenhouse; order a 1-tier bench and ask for extra top supports

Due to size and weight, extra shipping charges apply.

WALL SHELVES

Attractive and strong redwood shelves made of top quality redwood. Shelves are 11" wide. Shelves cannot be full length of the greenhouse, they must stop at least one bay from the corner.

	Length			
Width	**5'**	**6'**	**7'**	**8'**
11"	$135	$140	$150	$160

INTERIOR BOARDWALK

Instead of using bricks or pavers in the center of your greenhouse, use our boardwalk to give your feet a rest with the natural flex of wood. Made with construction grade Clear All-Heart Redwood. Size dependent on width of door.

24" wide . . . $55/ linear ft.

30" wide . . . $63/ linear ft.

35" wide . . . $72/ linear ft.

SOIL BENCHES

Bring your raised bed gardening inside the greenhouse by using our 8" deep soil benches. Perfect for potting and propagating. Easy to install. Available in 32" and 36" heights (please specify when ordering). Custom lengths available. Made with construction heart Redwood.

Width	4'	6'	8'
24" & 27 ½"	$370	$400	$490
32"	$390	$420	$520
37"	$400	$430	$540

SOIL BENCH TOPS FOR SOIL BENCHES

Make your soil bench more versatile with these soil bench tops. When your soil bench is not being used, convert it to a slat bench with these toppers.

26" panel for 27 ½" wide bench . $130

26" panel for 32" wide bench . . . $140

26" panel for 37" wide bench . . . $150
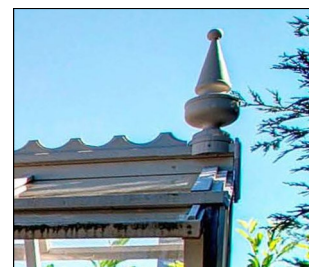
SOIL WARMING CABLES FOR SOIL BENCHES

Automatic cables for warming of soil temperature. Comes with built-in thermostat preset to 70°F. Ready to plug into any 120 volt outlet. Use with your soil bench.

Length	Area to heat	Watts	Price
12'	3 sq. ft.	84	$40
24'	6 sq. ft.	126	$45
48'	12 sq. ft.	168	$50

RIDGE SCALLOPS AND FINIALS

Dress up your greenhouse with our handmade scallop and finial. A nice addition to any freestanding greenhouse and a great look for your garden!

Ridge Scallop . . . $24/ft.

Finial with Base . . . $250 each