SUNGLO GREENHOUSES
FREESTANDING GREENHOUSE FOUNDATION GUIDE

LOCATION

The most desirable location for your greenhouse is placing the greenhouse so it is covered by the shade pattern of a deciduous, (leaf bearing), tree during the hottest time of the day during the hottest time of the year. That's ideal. Barring this, morning and afternoon sun is best with shade in the early afternoon to help cool the greenhouse and surrounding ground. If these conditions do not exist you will need to use an external shade cloth draped over the greenhouse fastened with bungee cords to the foundation base to help reduce solar gain during the late spring and through the summer.

THE FOOTINGS

IT IS CRITICALLY IMPORTANT YOU START WITH A SQUARE SOLID AND LEVEL FOOTING TO ATTACH YOUR GREENHOUSE. Our greenhouses are designed to be attached to a wood sill plate. If you decide to locate your greenhouse directly on the ground use a 4" x 6" pressure treated wood sill plate set on edge and buried in the ground with approximately _" to 1" of the wood plate showing above the ground. We recommend using pressure treated wood due to its long life span. You can use high quality cedar of redwood, however these will not have the same life span as pressure treated wood products.

If there is an existing concrete pad which you can use you will still need to attach a wood plate. Fasten a 2" x 4" pressure treated wood sill plate to the concrete pad using concrete wedge anchors, or similar fasteners. Make sure the fasteners are counter sunk into the wood so they are level to the top of the wood plate.

DRAINAGE

Drainage needs to be considered to remove excess water from your greenhouse site. If you have poor drainage you may need to install a "French" drain. This is a simple bed of crushed rock or gravel with perforated piping graded and buried below your greenhouse to lead water away from your site.

If your site has a high moisture content you will need to install a vapor barrier. The vapor barrier is a 6 mil black plastic. Do not use a weed block. These will not prevent excess humidity from entering your greenhouse. Line the interior of your foundation base right up to the wood with the plastic and cover the plastic with crushed rock, paving stones etc. This will prevent the greenhouse from wicking up excess ground moisture into the greenhouse. This is very important in wet areas. Afterwards if the greenhouse is too dry, you can "poke" a couple of holes through the plastic to allow some ground moisture to enter the greenhouse.

If you are using a concrete pad make sure the pad has been sealed with a concrete sealer prior to the installation of your greenhouse.
FLOORS

If your greenhouse location is directly on the ground using crushed rock or gravel over top of your vapor barrier will work fine and is inexpensive. If you'd like to install paving stones down the center of your greenhouse make sure you grade your gravel to allow the additional height of the paving stones. Keep the height of the paving stones level to the top of the wood plate.

FOUNDATION DIMENSIONS

*Your foundation needs to be level and square.* A true level and square foundation base will reduce installation problems later on. All dimensions listed are measured from the outside to the outside of the foundation base. These dimensions allow a 1” border around our attachment rails. This is designed to allow a safe margin for irregularities in the wood plate.

ELECTRICITY LOCATION

Your greenhouse requires electricity to operate the exhaust fan, heater etc. We recommend planning the route you will need for your electricity utility line so it terminates under the foundation plate inside the greenhouse on the back wall dead center. Sunglo recommends that you check with your local building department for local codes and requirements. Sunglo also recommends using a licensed qualified electrician for all final connections. Below are the requirements for electricity.

FOR GREENHOUSES USING 110 VOLT POWER YOU’LL NEED 110 VOLT / 20 AMPS

FOR GREENHOUSES USING 220 VOLT POWER YOU’LL NEED 220 VOLTS / 30 AMPS

CLEANING & MAINTENANCE

Your Sunglo Greenhouse is extremely durable. However proper care will promote a long life, increase sunlight transmission and your enjoyment. We recommend cleaning both the inside and outside at least twice yearly. Using a garden hose and a bucket of warm water with one ounce of household beach per gallon & enough liquid dish soap for suds, carefully hose down the greenhouse and lather the greenhouse exterior with a soft terry cloth. Carefully loosen the dust and dirt and rise thoroughly. On the inside carefully cover or remove any electrical controls or devises with a plastic garbage bag and gently clean the inside of the greenhouse using a misting stream of water and a soft terry cloth.

Make sure you clean out the weep holes on the exterior of the greenhouse as well. In addition if you have any algae growth pour a solution of 2 ounces of bleach per one gallon of warm water into the lower U rail and the upper H rails to help inhibit growth. Other than the twice annual cleaning your greenhouse should not require any other maintenance.

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DOOR DROPS

If you are planning on building a raised footing or kneewall to raise the height of your greenhouse you will need to follow the dimension guide below.

ON TOP OF YOUR PRIMARY FOUNDATION BASE USING ADDITIONAL 4"X6" PRESSURE TREATED WOOD, CONCRETE BLOCKS, Poured CONCRETE, ETC. CREATE A KNEEWALL TO YOUR DESIRED HEIGHT WITH A DOOR OPENING AS SHOWN IN THE DIAGRAM BELOW. THEN BEFORE ORDERING MEASURE THE EXACT HEIGHT OF THE WALL AND CALL US WITH THAT MEASUREMENT. WE WILL MODIFY YOUR GREENHOUSE DOOR POSTS AND SUPPLY A FILLER THAT WILL BE INSTALLED ABOVE THE DOOR TO THE SAME HEIGHT AS YOUR WALL.

**MODEL 1000 SERIES DOOR OPENING MUST BE 30 _” ON CENTER**

**MODEL 1200 AND 2100 SERIES SINGLE DOOR SET OPENING LEFT OR RIGHT OF CENTER 30 _”**

**MODEL S 1200 AND 2100 SERIES DOUBLE DOOR SETS ARE TO BE 60 _” ON CENTER**
TYPICAL 4" X 6" PRESSURE TREATED WOOD FOUNDATION BASE SET IN GROUND

CRUSHED ROCK OR GRAVEL

6 MIL VAPOR BARRIER

GREENHOUSE LOWER "U" RAIL

4" X 6" PRESSURE TREATED WOOD BASE SET INTO GROUND

GROUND LEVEL
SUNGLO GREENHOUSE FOUNDATION GUIDE

1. USE QUALITY PRESSURE TREATED WOOD (4" X 6") AS YOUR FOUNDATION BASE
2. MEASURE TWICE BEFORE CUTTING YOUR WOOD TO INSURE PROPER DIMENSIONS
3. EXCAVATE A SHALLOW FOOTPRINT SLIGHTLY LARGER THAN THE DIMENSIONS OF THE GREENHOUSE APPROXIMATELY 6" DEEP. LEVEL THIS AREA OFF WITH ABOUT 1" TO 2" OF 5/8" CRUSHED ROCK AND PLACE YOUR WOOD FRAME, NARROW SIDE UP, INTO THE FOOTPRINT. THE WOOD PLATE SHOULD BE ABOUT _" TO 1" ABOVE GROUND LEVEL.
4. USING CORNER METAL BRACING/LAG BOLTS/TOE NAILING ETC. BUTT FASTEN THE WOOD PLATES TOGETHER MAKING SURE THEY ARE THE CORRECT LENGTHS AND MAKE SURE THEY ARE ABSOLUTELY LEVEL AND SQUARE. TAMP THE EARTH BACK TO THE OUTSIDE OF THE WOOD FRAME
5. COVER THE INSIDE GRAVEL WITH A VAPOR BARRIER. IE. 6MIL BLACK PLASTIC THEN COVER THE PLASTIC WITH MORE 5/8" CRUSHED ROCK. LEVEL & TAMP THE ROCK DOWN TO ABOUT _" BELOW THE TOP OF THE WOOD PLATE
6. IF YOU DECIDE ON USING PAVING STONES FOR A PATHWAY MAKE PROVISIONS FOR THE DIMENSIONS OF THE PAVERS SO THEY SIT NO HIGHER THAN THE TOP OF THE WOOD FOUNDATION PLATE

NOTE: ALL DIMENSIONS ARE OUTSIDE TO OUTSIDE! AFTER YOUR LOWER RAILS ARE INSTALLED YOU SHOULD HAVE OR A 1" LIP ON THE OUTSIDE OF THE GREENHOUSE FRAME.

SEE TABLE ABOVE FOR GREENHOUSE FOUNDATION LENGTH

FOUNDATION PLATES MUST BE ABSOLUTELY LEVEL AND SQUARE

BRING IN YOUR ELECTRIC SERVICE ON THE INSIDE EDGE DEAD CENTER ON THE BACK WALL OF THE WOOD BASE PLATE

FASTEN CORNERS WITH ANGLE BRACES & TOE NAIL OR LAG THROUGH WITH GALVANIZED LAG BOLTS

FROM THE INSIDE CORNERS, MEASURE DIAGONALLY FROM POINT TO POINT. BOTH MUST BE EQUAL TO BE SQUARE.
Typical Wood Plate to Existing Concrete Pad Attachment

Concrete Pad

Using the supplied dimensions fasten a 2" x 4" pressure treated frame together. Counter sink two holes on each of the four sides of the frame. Using a masonry drill bit drill into the concrete pad & fasten the frame to the concrete using wedge anchors. Make sure the anchor is set flush to the top of the wood base.

Counter Sink Fasteners

2" x 4" Wood Plate

Existing Concrete Pad