

**SUNGLO GREENHOUSES
FOUNDATION GUIDE
MODEL SERIES: 1500 - 1700 LEAN-TO GREENHOUSES**

THE FOOTINGS

IT IS CRITICALLY IMPORTANT YOU START WITH A SQUARE SOLID AND LEVEL FOOTING TO ATTACH YOUR GREENHOUSE BUILDING. Most of our greenhouses can be installed on 4 X 6 pressure treated lumber set on the 4" edge and buried in the ground with approximately 1" showing above grade. Some people have successfully used 2 X 4 pressure treated lumber. However, we recommend the additional weight of the 4 X 6. If you are using a concrete footing you must attach a 2 X 4 wood plate to the top of the concrete footing. Our greenhouses are designed to be fastened to a wooden surface.

In some cases you may wish to raise the greenhouse for additional height. In order to do this a "Pony or Knee wall" built of conventional framing, or built-up timbers will be adequate. You may want to keep your Sunglo door at the ground level, (this can be accomplished by notching the foundation 30 1/4" wide for the door opening). Please refer to diagram #2 - foundation guide for door drop, or call your Sunglo representative for more information on this procedure. **THIS MUST BE SPECIFIED WHEN YOU ORDER YOUR GREENHOUSE. MODIFICATIONS ARE DONE AT THE FACTORY.**

DRAINAGE

Drainage should be considered for removing excess water inside the greenhouse. Water spills are quite common in greenhouses, therefore inside drainage will be a benefit. We recommend gravel, a French drain or rock and perforated pipe, to help direct water away. If you are installing your greenhouse on a deck or lanai and drainage is a concern, you might consider placing a heavy layer of plastic down and provide routing for the water.

If your greenhouse foundation site has a high moisture content, (high water table, sand, clay etc...), it will be necessary to install a vapor barrier. The vapor barrier will keep excess moisture from accumulating in your greenhouse. The first step is to use a heavy plastic liner to line your site, then place on the liner 2 to 4" of drain gravel. The liner will prevent ground moisture from wicking-up into your greenhouse which will cause excess humidity in the air. If you find the air to be too dry inside your unit, just poke a couple of holes in the liner for additional humidity.

If you are pouring a concrete slab foundation you must allow proper time for the concrete to cure, or dry-out. Non-cured concrete can wick-up moisture from the ground and deposit it into your greenhouse causing excessive humidity.

FLOORS

A concrete pad is not necessary for your greenhouse installation. For a natural look, use crushed stone and stepping stones. A row of concrete paving blocks along with gravel under the benches is inexpensive, easy to install and looks great. Stone or concrete pavers also provide a thermal mass which helps balance the greenhouse temperature to the outside.

FOUNDATION REQUIREMENTS

Your foundation plate needs to be level and square. A true and level foundation will save challenges later when installing your Sunglo Greenhouse.

The dimensions listed below are measured from the outside of the top plates. These dimensions will allow a 1" border around the complete greenhouse.

Pressure treated 2 X 4 vertical wood "plates" fastened to your existing structure are normally used for the lean-to greenhouse construction. Some people will remove the existing siding for a better fit. However this is not necessary in all applications. Flashing of the top horizontal treated wood "plate" should be considered prior to installation of your Sunglo lean-to. Any flashing should extend 3" on each side of the horizontal wood "plate".

NOTE: ALL FLASHING MUST BE DONE BEFORE INSTALLATION OF THE GREENHOUSE.

Attaching your Sunglo lean-to model to a concrete, or similar material wall, requires drilling and installing lead moly's or concrete expansion bolts.

NOTE: MAKE SURE THE BOLT FASTENERS ARE RECESSED SO THEY WILL NOT INTERFERE WITH THE GREENHOUSE MOUNTING.

Foam insulation or mortar can be used to fill any gaps. The base wood plates, 2 X 4 or larger, must be set 90 degrees to the wall vertical plates or vertical attachment and must be true and square to itself. A quick check for square is to measure diagonally across in both directions. These measurements must be equal. The following dimensions listed in diagram #1 are to be used for foundation measurements.

All dimensions are outside to outside and will leave a 1" border on all sides of the greenhouse.

NOTE: THE VERTICAL WOOD PLATES ARE MEASURED FROM THE TOP SURFACE OF THE BASE WOOD PLATE TO THE OUTSIDE EDGE OF THE TOP HORIZONTAL 2 x 4 WOOD PLATE. THE ENDS ARE MEASURED FROM THE FACE OF THE VERTICAL WOOD PLATES TO THE OUTSIDE EDGE OF THE BASE WOOD PLATES. SEE DIAGRAM #2.

If your greenhouse will sit on top of a "pony" wall and required a door drop, see diagram #3 for the requirements. Drainage, utilities, pavers and gravel should all be considered prior to the actual installation of the greenhouse. These requirements will be easier to install at this time.

PRIOR TO BUILDING ON THE FOUNDATION, RE-CHECK YOUR FOUNDATION TO BE SURE IT IS SQUARE AND LEVEL. The unit will not join correctly if the foundation is not square and level. You may have to shim your foundation in order to assure a level surface.

DIAGRAM # 1

<u>MODEL</u>	<u>END</u>	<u>SIDE</u>	<u>VERTICAL</u>
1500A	5' - 2 1/2"	5' - 2"	7' - 8"
1500B	5' - 2 1/2"	7' - 8"	7' - 8"
1500C	5' - 2 1/2"	10' - 2"	7' - 8"
1500D	5' - 2 1/2"	12' - 8"	7' - 8"
1500E	5' - 2 1/2"	15' - 2"	7' - 8"
1500F	5' - 2 1/2"	17' - 8"	7' - 8"
1500G	5' - 2 1/2"	20' - 2"	7' - 8"
<u>MODEL</u>	<u>END</u>	<u>SIDE</u>	<u>VERTICAL</u>
1700B	7' - 8 1/2"	7' - 8"	7' - 7 1/2"
1700C	7' - 8 1/2"	10' - 2"	7' - 7 1/2"
1700D	7' - 8 1/2"	12' - 8"	7' - 7 1/2"
1700E	7' - 8 1/2"	15' - 2"	7' - 7 1/2"
1700F	7' - 8 1/2"	17' - 8"	7' - 7 1/2"
1700G	7' - 8 1/2"	20' - 2"	7' - 7 1/2"

NOTE: THESE DIMENSIONS ALLOW FOR A 1" BORDER AROUND YOUR GREENHOUSE.

SUNGLO GREENHOUSES LEAN-TO MODEL FOUNDATION GUIDE

Revised 2/25/98
Drawings are not to scale

NOTE: ALL LENGTH & WIDTH MEASUREMENTS ARE OUTSIDE TO OUTSIDE AND ARE 1" OVERSIZED TO ALLOW FOR IRREGULARITIES IN THE WOOD SURFACES. THE BASE FOUNDATION & HORIZONTAL "HEADER" MUST BE LEVEL & THE VERTICAL ATTACHMENT PLATES MUST BE PLUMB

THIS IS CRITICALLY IMPORTANT

2" X 4" "HEADER" PLATE

TYPICAL VERTICAL AND HORIZONTAL "HEADER" PLATES ARE 2" X 4" PRESSURE TREATED PLATES ATTACHED TO THE EXISTING STRUCTURE

BASE FOUNDATION PLATES 4" X 6" PRESSURE TREATED WOOD SET ON EDGE WITH APPROX 1/2" TO 1" SHOWING ABOVE GRADE

MEASURE THESE DIAGONALS TO DETERMINE SQUARE THESE BASE DISTANCES MUST BE EQUAL

MEASURE THESE DIAGONALS TO DETERMINE SQUARE THESE VERTICAL PLATE DISTANCES MUST BE EQUAL

LINE THE INSIDE OF THE FOUNDATION WITH A VAPOR BARRIER, I.E. 6 MIL PLASTIC & COVER WITH CRUSHED ROCK, GRAVEL, PAVERS, ETC....

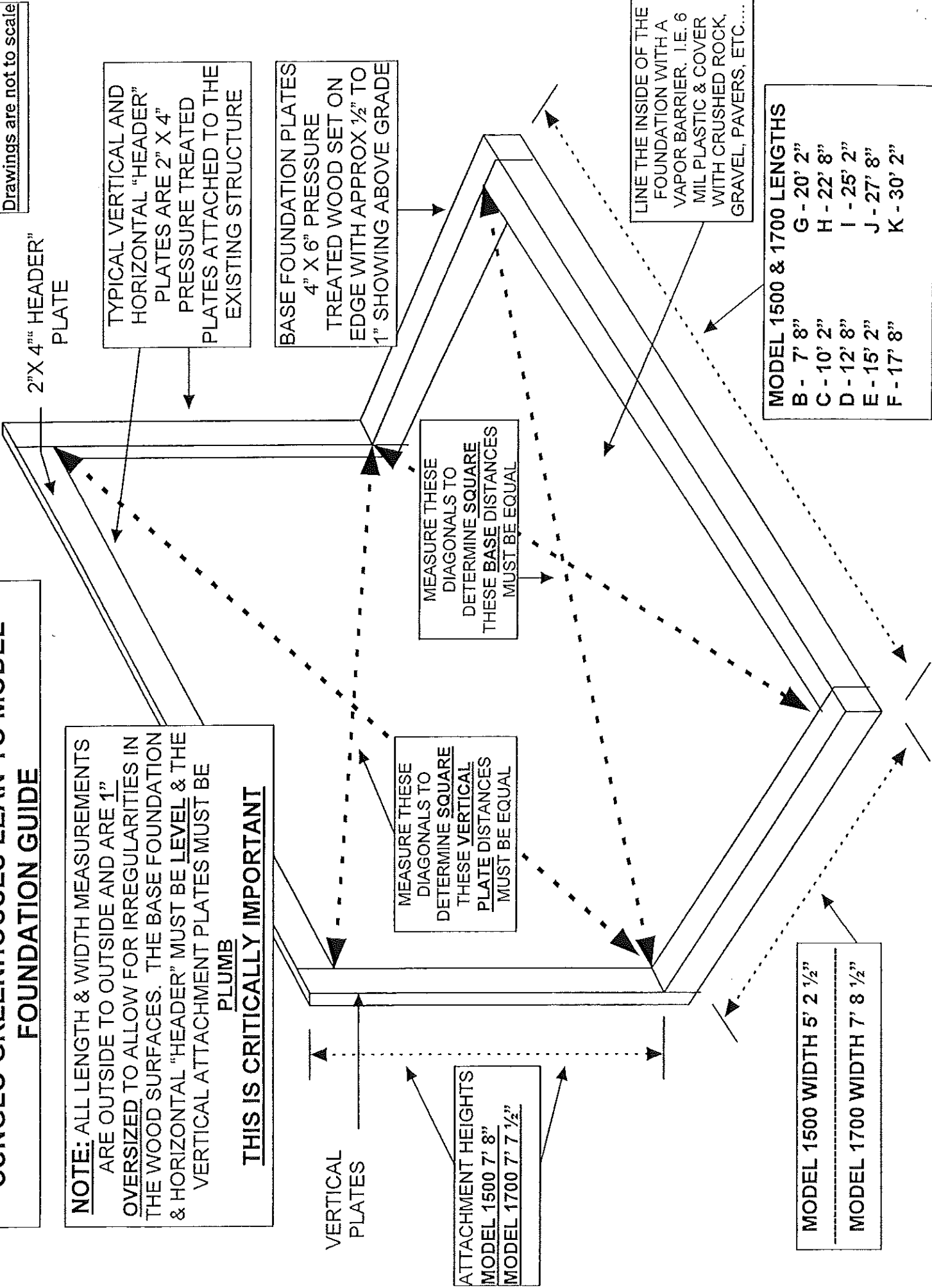
MODEL 1500 & 1700 LENGTHS

B - 7' 8"	G - 20' 2"
C - 10' 2"	H - 22' 8"
D - 12' 8"	I - 25' 2"
E - 15' 2"	J - 27' 8"
F - 17' 8"	K - 30' 2"

MODEL 1500 WIDTH 5' 2 1/2"
MODEL 1700 WIDTH 7' 8 1/2"

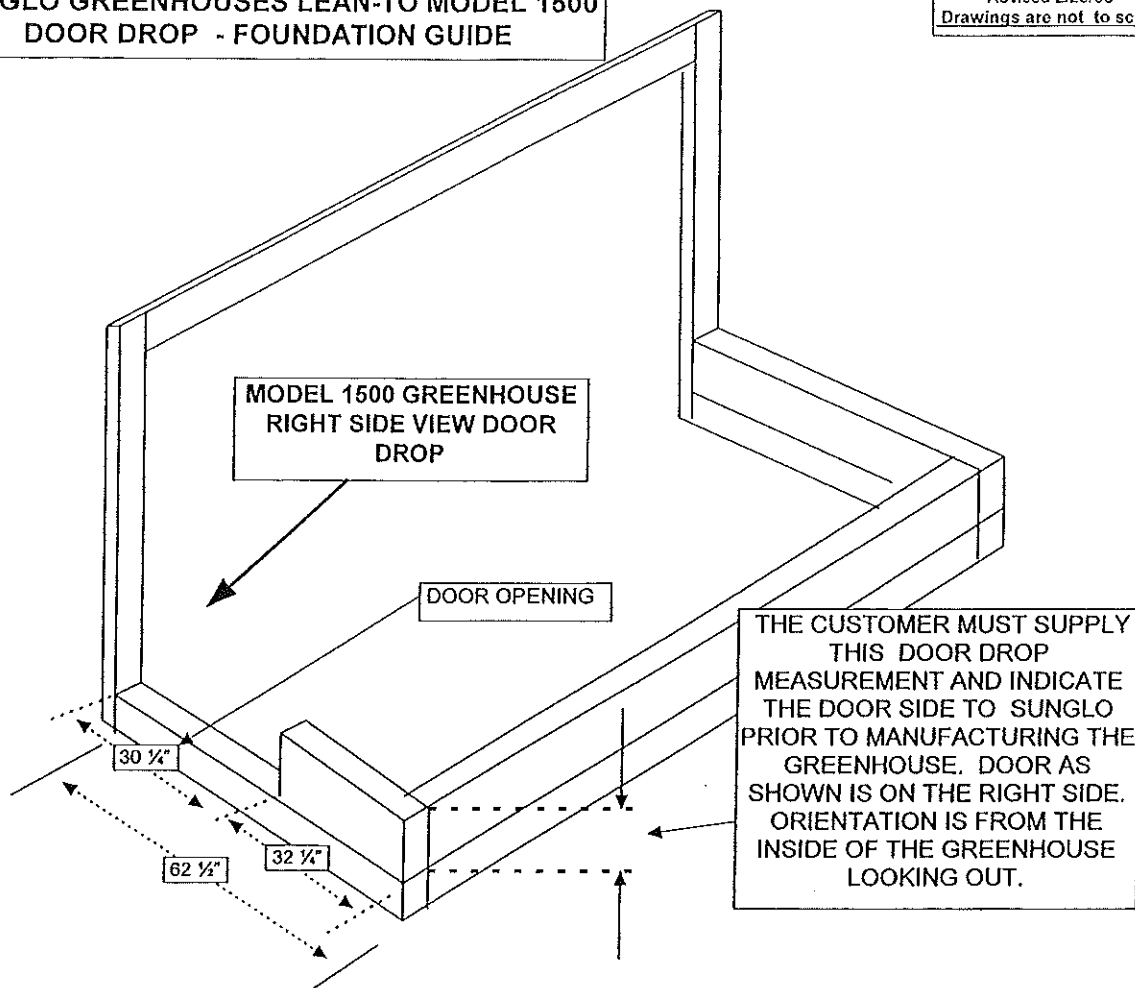
ATTACHMENT HEIGHTS
MODEL 1500 7' 8"
MODEL 1700 7' 7 1/2"

VERTICAL PLATES



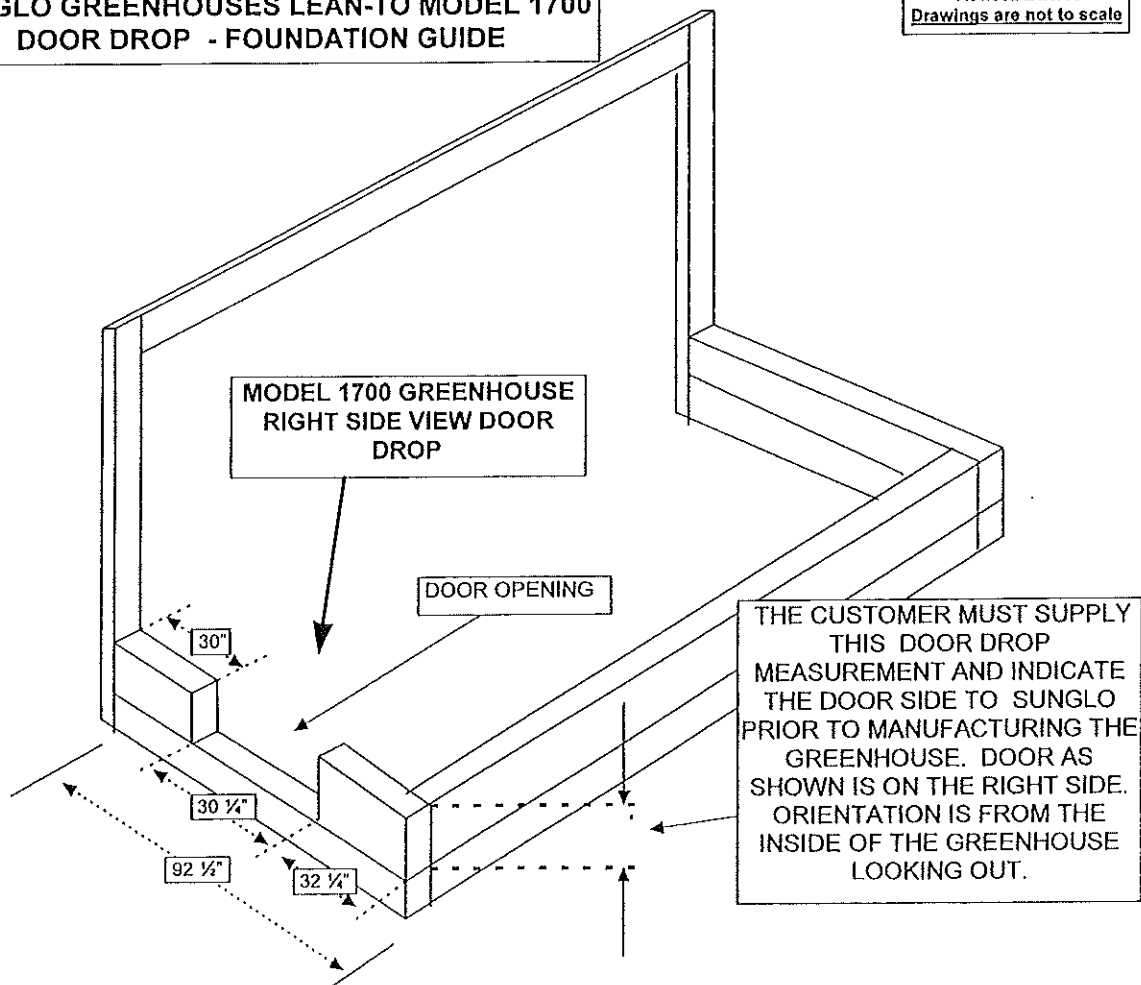
**SUNGLO GREENHOUSES LEAN-TO MODEL 1500
DOOR DROP - FOUNDATION GUIDE**

Drawings are not to scale

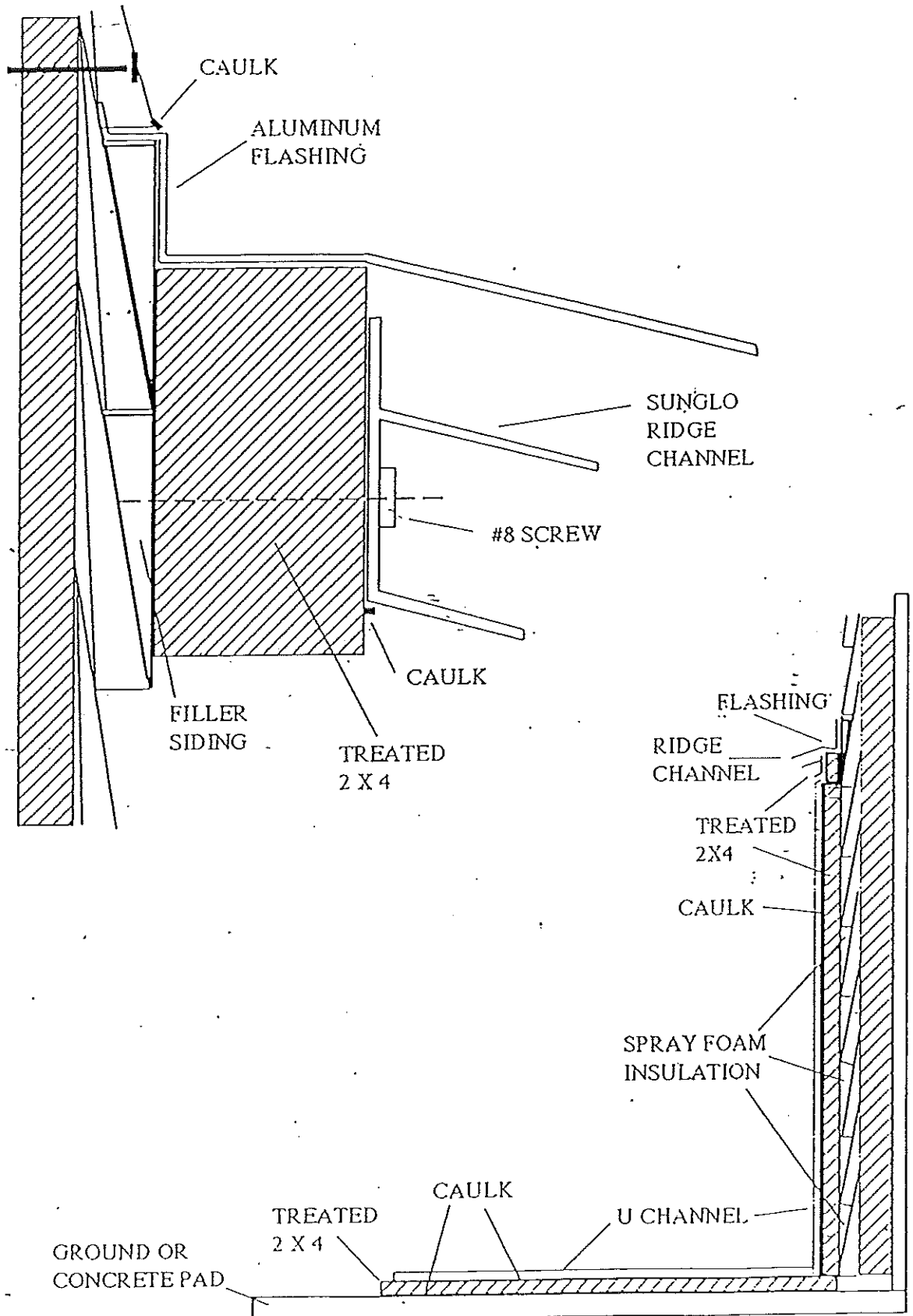


**SUNGLO GREENHOUSES LEAN-TO MODEL 1700
DOOR DROP - FOUNDATION GUIDE**

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CONSTRUCTION TECHNIQUE FOR LEAN-TO



TYPICAL POURED CONCRETE PERIMETER BASE FOOTING WITH PRESSURE TREATED WOOD ATTACHMENT PLATE

CENTER LOWER RAIL ON WOOD AND FASTEN WITH CAULKING AND SCREWS

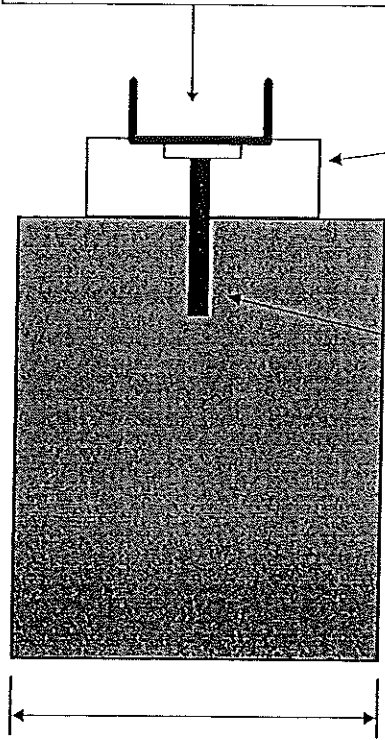
DRAWING NOT TO SCALE

PRESSURE TREATED 2" x 4" OR 2" x 6" IF PREFERRED

GRADE LEVEL OR HIGHER IF YOU ARE PLANNING A KNEEWALL FOUNDATION

5/16" ANCHOR COUNTERSUNK INTO THE WOOD SILL PLATE

TYPICAL DEPTH 6" TO 12"



TYPICAL WIDTH 6" TO 8"

TYPICAL 4" X 6" PRESSURE TREATED WOOD PERIMETER FOUNDATION BASE

CRUSHED ROCK OR GRAVEL ON THE INSIDE OF GREENHOUSE

CENTER LOWER RAIL ON WOOD AND FASTEN WITH CAULKING AND SCREWS

SET ABOUT A 1/2" ABOVE GRADE

PLASTIC VAPOR BARRIER

4" X 6" PRESSURE TREATED WOOD PERIMETER BASE

