

BASIC PLANS FOR 30'x 96' SOLAR GREENHOUSE

MATERIAL LIST:

Cedar, Redwood, Cypress or Pressure-Treated Lumber

34	8' x 4" x 4"	Side Posts
17	12' x 4" x 4"	Middle Posts
32	12' x 1" x 6"	Ridge Bars, Ground Plates
40	16' x 2" x 4"	Rafters and End Plates
80	12' x 2" x 4"	Braces, Sides, Rafter Braces, Rafter Ends
16	12' x 1" x 4"	Upper Braces
20	8' x 2" x 4"	End Studs, Braces
16	12' x 2" x 4"	Side Post Rafter Seats
24	12' x 1" x 2"	Securing Poly Roof
2	4' x 8' x 5/8"	Plywood

Galvanized Nails

50 Lbs 16p

25 Lbs 10p

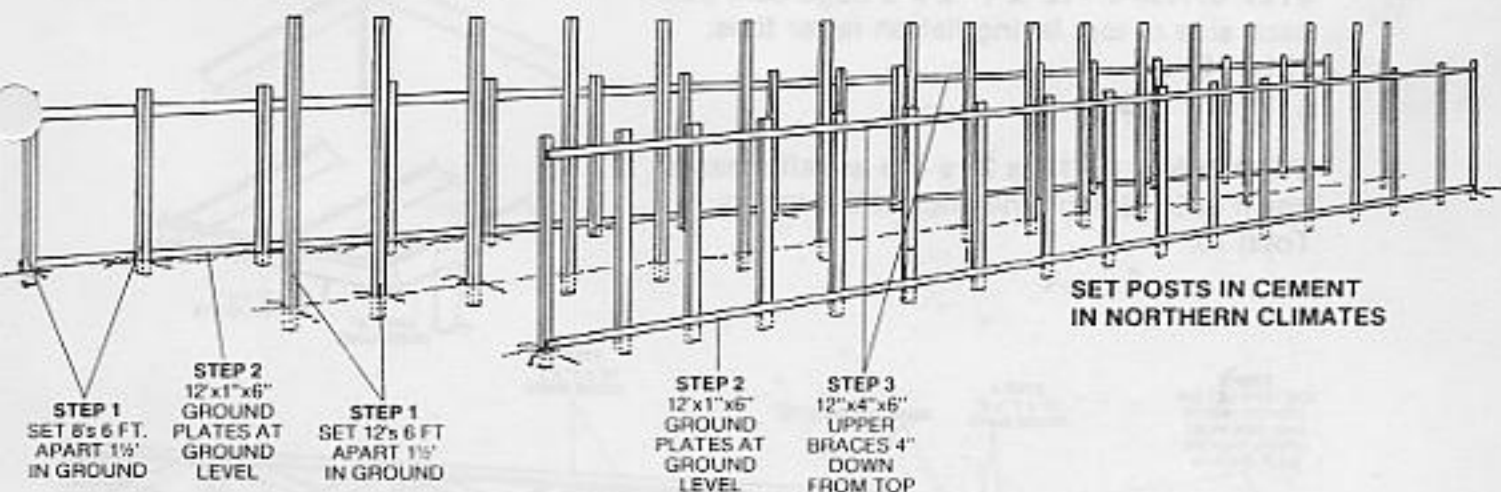
Poly-Film

40' x 100' 6 mil 2 rolls

Patching Tape 1 roll

Blower Fan and Wiring

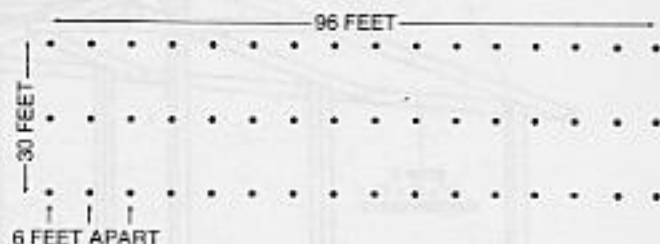
CONSTRUCTION STEPS:



STEP 1: Set 17—8' x 4" x 4"s 1½' in ground, 6' apart on each side. Total 34. Set 17—12' x 4" x 4"s 1½' in ground, down the middle of greenhouse, 6' apart from center of post to center of post. Total 17.

STEP 2: Nail 16—12' x 1" x 6"s to side posts on outside of each side at ground level, 8 on each side. Total 16 ground plates. 12' x 2" x 4"s can be substituted for strength.

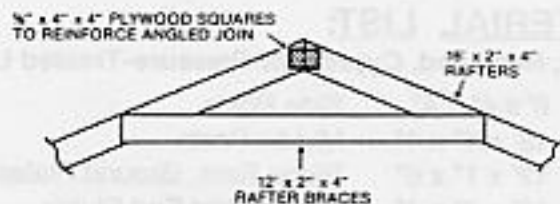
STEP 3: Nail 16—12' x 1" x 4"s to side posts on outside of each side 4" down from top, 8 on each side. Total 16 upper braces.



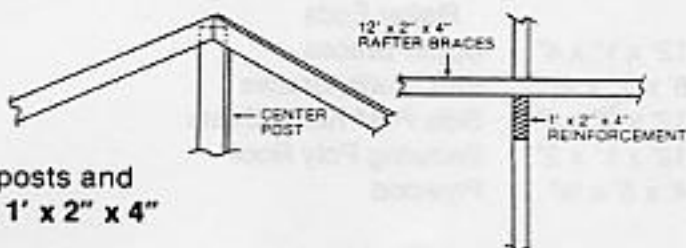
BASIC PLANS FOR 30'x 96' SOLAR GREENHOUSE

(continued)

STEP 4: Build each rafter with 2—16' x 2" x 4"s and 1—12' x 2" x 4". Cut ends of 16's with angle where they meet and nail 12's on top of 16's as rafter braces. Total finished width 31 feet.



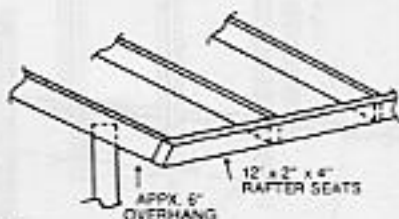
STEP 5: Set rafters (17) on center posts 1" higher than top. Nail here and to side posts, laying on top of upper braces, making sure all posts are plumb. Where center posts and 12' x 2" x 4"s cross, reinforce with 1' x 2" x 4" pieces.



STEP 6: Nail 8—12' x 1" x 6"s ridge bars down each side of top, laying flat on rafter tops. Total 16.



STEP 7: Nail 8—12' x 2" x 4"s as rafter seats down each side on the ends of the rafters. Total 16.



STEP 5
RAFTERS SET ON
CENTER POSTS
AND SIDE POST
UPPER BRACES
(NOT SHOWN)

STEP 6
12' x 1" x 6"
RIDGE BARS

STEP 5
1' x 2" x 4"
REINFORCEMENTS

STEP 6
12' x 1" x 6"
RIDGE BARS

STEP 7
12' x 2" x 4"
RAFTER SEATS

Note:
FOR CLARITY,
12' x 2" x 4"
UPPER BRACES
NOT SHOWN

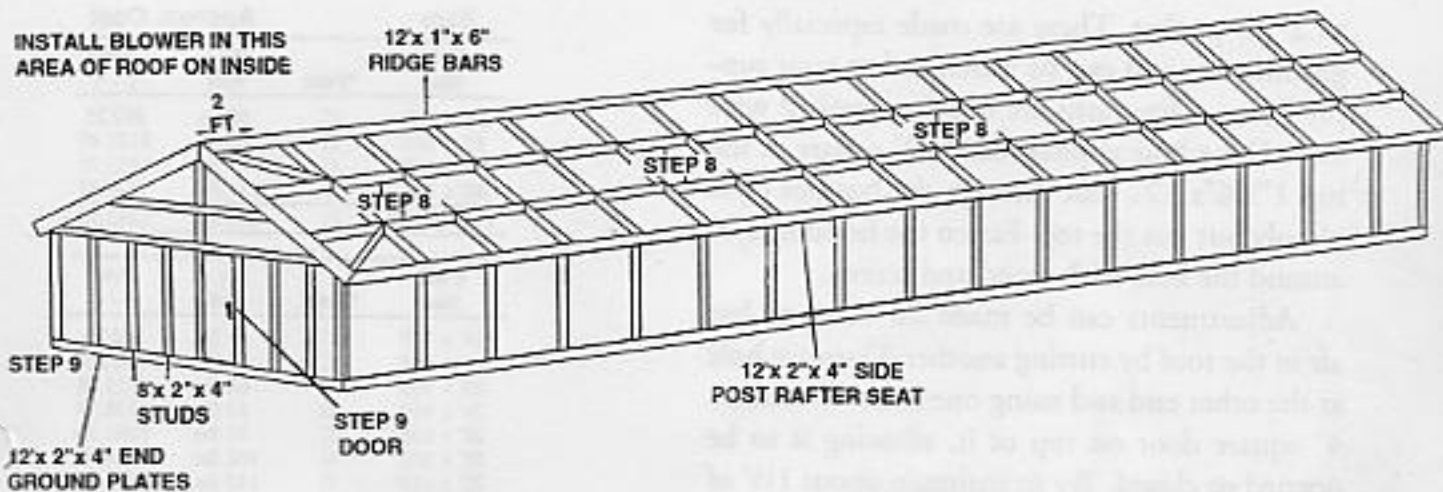
STEP 7
12' x 2" x 4"
RAFTER SEATS

BASIC PLANS FOR 30'x 96' SOLAR GREENHOUSE

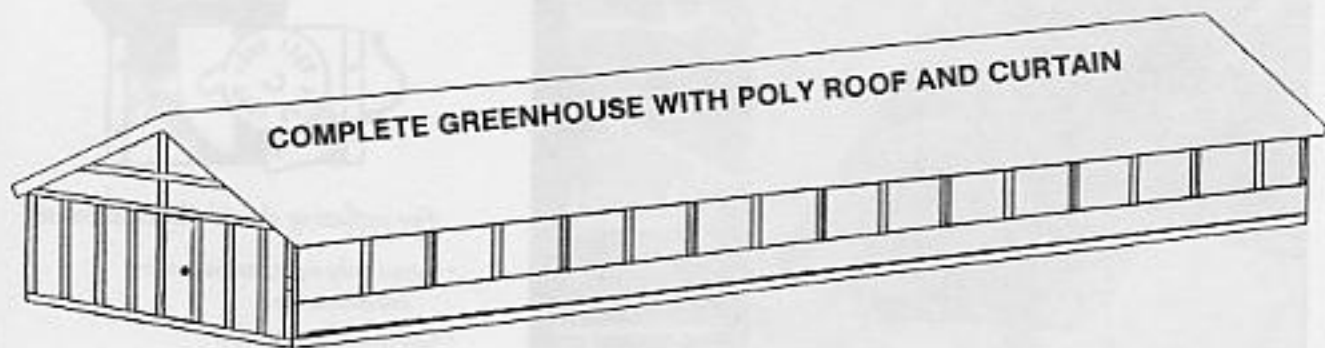
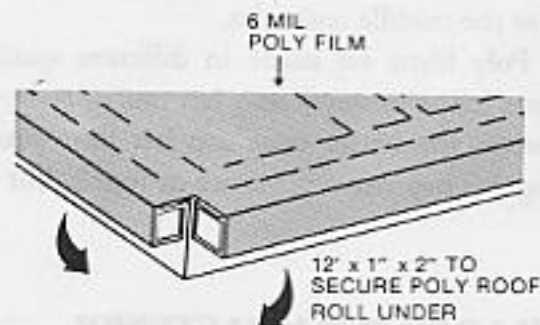
(continued)

STEP 8: Cut 70½" x 2" x 4"s for braces between rafters, two between each rafter. Total 64. See large illustration.

STEP 9: Frame ends with 8—16' x 2" x 4"s (2 upper braces and 2 end ground plates each side), and 7—8' x 2" x 4" studs for each end. Build door with ½" plywood between 2 end studs. See large illustration.



STEP 10: Pull one roll of Poly-Film 6 mil over each side of greenhouse roof using ropes. Tie all corners down. After both sheets are even, use double-headed nails and 12' x 1" x 2"s, rolling the ends under and nailing to the side post rafter seat. Aluminum locks can be used instead of 1 x 2"s (see page 58).



(To build 30' x 48' greenhouse, divide materials in half and build according to instructions.)