Cold Frame Construction Supplies List

4 – 2″ x 4″ eight foot boards
2 – 2″ x 12″ eight foot boards
1 – 2″ x 8″ eight foot board
3 – 1/2′ x 2″ eight foot trim pieces (these are basically scrap)
4 – 2′ x 4′ pieces of plexi glass
8 – 3/8″ bolts and nuts. The bolts should be 4 inches long
15 – 3″ deck screws
40 – 1 1/2″ deck screws
8- hooks and eye bolts (if your cold frames are going to be in a high wind area)

Materials Discussion

The type of wood you use to build your cold frame is based on how much you can afford right now.

Redwood or cedar in last longer. But they cost almost 3 times as much as Douglas Fir. I don't think they will last 3 times as long, but should easily last twice as long. Because of the cost, mistakes while building are also a lot more costly with cedar or redwood.

In the end I decided to go with Douglas fir and then replace it when it wore out. My cold frames have been through 6 winters and are starting to show signs of breaking down. The boards are looking very weathered and are starting to rot and warp. I think I will get one more winter out of them and then the frame itself will need to be replaced.

The lids are in better shape. Based on what I'm seeing now I would think my lids will last another 2 or 3 years easily. Keep in mind also that I don't have a shed to put my cold frames in during the times they are not in use. So they just sit out all summer in the sun and rain. If you could store them inside for those 5 months I'm sure you would extend the life.

If (and when) I have to do it over I think I would use the less expensive Douglas fir for the frame itself and then use cedar (or redwood) for the lids. The lids are much more complicated to build so the longer I can get them to last the better.

Tools Needed
Chop saw or radial arm saw
Hand skill saw
Table Saw
Electric Drill
1/8 inch drill bit (to pre-drill holes)
3/8 inch bit for bolts

Cut List

A. 1- 2”x12”x8’ – Do not cut

B. 1- 2”x8”x8’ – Do no cut

C. 1-2”x12”x8’

- Cut board exactly in ½ (48 inches) with hand saw or radial arm saw
- Cut an angle cut on one side of each of the resulting 48 inch boards.
- Cut angle starts at 12” at the back and goes to 8” at the front you will need to use the electric skill saw for this cut

D. 1 – 2”x4”x8’

- Cut 1 of the 2x4 exactly in ½ (48 inches).
- Set one of the resulting 4 foot boards aside for later
- Rip the other 4 foot board on the table saw into 2-1 ½ inch boards
- One of the resulting boards will be the stretcher board for the frame, the other is this projects only significant scrap.

E. 3 – 2”x4”x8’

- Rip 3 2x4’s into 1 ½ inch boards (keep any resulting scrap) on table saw
  You now have 6 1 ½ x 1 ½ inch boards
  -Cut 4 of the resulting boards into 48” lengths with chop saw
- This will give you 8- 4 foot 1 ½ inch boards. These will be the side boards for the lids.
- Rip the 2 remaining 1 ½ x 1 ½ x 8’ boards once more on the table saw. Rip them to 1 inch on one side. So you will have 2 resulting 1”x1 ½”x8’ boards.
- You should have 2- ½ inch or so pieces of scrap that are 8 foot long. Hang on to these to put on the bottom of the frame.

F. 2- 1”x1 ½”x 8’

- Cut the 2- 1 inch boards on the chop saw, into 21 inch lengths, you will have 8 resulting pieces. (these are the tops and bottoms of the lids) (anything left over is scrap)

G. 8- 1 ½” x 1 ½”x 48” – This are the sides of the lids

- Cut a ¾’ deep slot that is around ¼ inch wide (the width depends on your plexi glass), in all 8 of the side pieces.
- This slot can be cut one of two ways. If you have a dato head cutter that will work perfectly. If not you can cut it with 2 or 3 passes of the saw blade on your table saw.
- Just be sure that the slot starts at 1 inch, (see the diagram on the next page)
- You could also cut this slot on a router table if you have one available to use.

H. Out of remaining 2x4x4 from step D.

- Cut 2- 8 inch and 2 12 inch pieces. On the chop saw (any thing left over is scrap)