

Cold frame

Materials:

- Recycled window - roughly 32"x26"
- 1x6 cedar fencing
- 1x6 cedar decking
- 1x2 cedar
- 3 - 2" hinges
- About 50 - 1-1/2" exterior grade screws
- 16 - 1-1/4" exterior grade screws
- 1 - 3" x 1/4" carriage bolt, two washers and a nut to fit
- Thread adhesive

Tools

- Drill or screwdriver, bits
- Handsaw or circular saw

Cut List:

- Back: Two - 1"x 6"x 30" (thicker cedar)
- Front: One - 1" x 6" x 30"
- Floor: Five - 1" x 6" x 30"
- Sides: Four - 1" x 6" x 24-1/2"
- Braces: Four - 1" x 2" x 10-1/2"
- Arm: One - 1" x 2" x 12"

Steps:



Measure the window in both directions



The box will be smaller than the window so that the rain will drip off



The back pieces are thicker than the sides and bottom



Screw the first layer of the

frame together, and put floor
in place

Build a box that measures approximately 2" smaller than the overall dimensions of your window. This allows a bit of overhang on the front and sides.

To build the first layer of the box, pre-drill and screw the sides to the front and back. Use the stronger, thicker decking boards for the back to provide extra strength where the window will be hinged. Then attach the front.



Use a screw long enough to get a good grip on the end grain



Mark the final flooring piece that will require cutting



Install the piece in the bottom

Once the first layer of the box is screwed together, set the bottom pieces in place. If there is a large gap in the floor, lift the frame and slide a board in place under it. Then use a pencil to trace a cut line to custom fit that last board. Cut and slide the board back in place and attach all the floor boards with screws through the sides. (Be sure to pre-drill before driving in the screws.)



Install a vertical brace in the corner



Attach the second level to the brace

Attach the 1" x 2" corner braces to the inside back of the frame using 1-1/4" screws. Then screw the top board to the corner braces to complete the back.



Use a straight edge to scribe the cutoff angle



Cut the side piece and install it with screws

Make the angled sidepieces by holding a 24" fence board on top of one of the existing sides. Use a straight edge to draw the angle from the top back down to the level of the front. Cut one angled board for each side.



Install a brace in the centre of each side for added support



Completed box without window



Detail of finished side

Attach the angled sides to the frame with screws through the back and one more through the tip of the angled board. Add a vertical brace in the center of the each side and secure it in place with screws through both boards.



Remove the old hardware and flashing from the window



Attach the hinges to the back of the frame



Choose best side of window for hinging



Pre-drill and screw the hinges and window together

Remove old hardware from the window, then prime and paint any exposed wood. Attach three hinges to the back of the frame, then attach the window to the hinges leaving equal

overhang on both sides.



Install a support arm for the window



Cold frame with support arm installed



Completed box with window

Make an arm (to hold the window open while working inside the box). Drill one 1/4" hole through the three layers: the side, the vertical support and the arm itself. Pass a carriage bolt through the hole in the side, place a washer on the bolt and then pass the bolt through the support arm. Add another washer and finally a nut. Use thread adhesive to lock the nut in place leaving the arm a bit loose so that it can move freely and easily.

Voila - you now own a cold frame!



Lid propped open