FROST-FREE FLORA

Get a head start on the growing season with our unique cold frame

Cold frames extend both ends of the Canadian growing season by acting as miniature greenhouses for frost-sensitive plants. Although this design includes the conventional salvaged storm window top, the system of booster frames makes it unique. By adding booster frames beneath the main frame, mature plants may be shielded from autumn frosts. Make the frames from 1 x 8 cedar boards.

Main Frame Tips

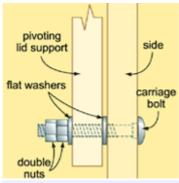
Once you have your materials, check that the salvaged window frame is square. If not, at least make sure your window is structurally sound—it can be trimmed



An early spring: Now the winter of discontent is no longer upon our warm and cozy plants. Use a cold frame when you need to extend the growing season: start seedlings or harden them off, force bulbs or grow early crops of cool-weather vegetables like lettuce and radishes

square before construction begins. The outside dimensions of the main frame should be 1/4" smaller than your window on the front and sides; the back side must be flush to allow hinging. The resulting overhang helps shed rain and makes the window easier to grab and open from any side.

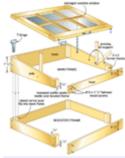
The window is angled to increase solar gain. That's why I made the front of the main frame half as high as the back. Dry-fit the main frame to match your window size, then join them into a frame with 2 x 2 corner blocks, #10 x 1 1/2" wood screws and weatherproof glue. Use a carpenter's glue with a type II rating, or polyurethane glue. The bottoms of the corner blocks on the main frame are raised 1/4", while the tops are flush, allowing the booster frame to nestle under the main frame and lock there.



Prop master: Double nuts secure the simple hardware pivot for the lid support

Using scrap left over from the front panel, cut two lid supports. Position the pivot holes for the supports far enough forward so the support ends extend over the front of the frame. This allows you to prop the window open slightly when just a little ventilation is needed. Add chains to stop the window from tilting back and damaging the hinges. Hook-and-eye latches will keep the wind from lifting the glass and breaking it.

The booster frames should be the same length and width as the main frame, but without tapered sides. The corner posts are cut the same length as the width of the booster frame's sides, but shifted upwards 1/4" during installation, creating an extended locking post on top to mesh with the frame above, and a pocket underneath for locking onto frames below.



CLICK ABOVE

For Cold Frame	Material	Size	Qty.
Glazed frame top	salvaged window		1
Main frame sides/back	cedar	3/4" x 7 1/2"	3
Main frame front	cedar	3/4" x 3 1/2"	1
Booster sides/front/back	cedar	3/4" x 5 1/2"	4
Corner posts	cedar	1 1/2" x 1 1/2"	8
Pivoting lid supports	cedar	3/4" x 1 1/2" x 8"	2
Hardware			
Galvanized flathead screws	#10 x 1 1/2"		
Window hinges	3" T-style with mounting screws		2
Galvanized bolts	5/16" dia. x 2 1/4"		2
Galvanized flat washers	5/16 dia.		4
Galvanized nuts	5/16 dia.		4
Window latches	hook-and-eye sets		2
Window chain and screws	brass 48"		2
Window handle	corrosion-resistant		1

