ICEBOX INSULATION

The standard iceboxes in the Westsail boats were made from a molded fiberglass liner, onto which 2" to 3" of urethane foam was attached to the outside of the liner, then it was set into the plywood cabinet. On some of the early boats, the urethane insulation was in sheets, stuck to the box with fiberglass putty. On later boats, Westsail changed to spraying the liner with urethane foam, letting it grow and cure, then shaving off the excess to fit into the cabinet. In some cases, the foam was covered with aluminum foil, then with a plastic sheet before setting it into the box. This helps as a radiation and moisture barrier. A 3/4" delrin drain was installed in the lower corner as a water drain.

The top of the counter around the box is 1/2" plywood, covered with formica, and was not normally insulated. The lids were usually plywood, without insulation, or a molded plastic insert, filled with foam, and attached to the lid. The insulation on the boxes was fairly good, however for a proper refrigeration system, additional insulation usually needs to be installed. If you use it carefully, spray cans of insulating foam can be used to fill in the voids, or you can use pieces of block foam, and fill around them with the spray can foam.

To improve the insulation against the hull behind the icebox, cut an access hole in the countertop, outboard along the hull side (inside of the locker), and check to see if the foam extends out to the hull. If the outboard top of the icebox is not accessible to drill the access holes, you can cut them in the bulkhead on the forward side of the icebox, inside the cabinet above the dinette seat, and against the hullside. Also cut an access hole at the bottom of the end of the cabinet just above the floor to check the insulation under the box. If either area is lacking insulation out to the hullside, it can be added using spray cans of urethane foam, which can be purchased at any building supply store. Attach a long tube to the spray can, and start filling the foam from the center, and work out to the edges. Be sure to put some plywood blocking around the drain hose to keep it clear. Some spun fiberglass can be stuffed around the drain fitting, to be easily removable for servicing the hose.

Make sure the underside of the top is insulated outboard of the opening lids. You can use a sheet of urethane foam, 2" to 3" thick, cut to fit, with formica glued to it as a finished surface. The corners can be caulked with a white polyurethane caulking to finish the job neatly. Use masking tape on the corners to outline the seam before caulking, then smooth the caulk, and pull the tape to obtain a neat caulking job. I have also seen some people block off part of the curved end inside the box using foam covered with formica, glued in place with caulking, and having the seams caulked.

If urethane foam in sheets is not readily available to you, cut the formica to make the insert pieces, tape the pieces together, and set in a temporary frame of 2"x 4" lumber to hold them. Use a spray can of foam to fill the insert, then trim off the excess, and install in the box with white polyurethane caulking.

On one boat I saw, the owner had stainless steel wire baskets made up to fit into the box to store his food, yet have it easily accessible. He had these made up to his patterns by a place that makes shopping carts for supermarkets. One basket fit on top of another, and filled the box neatly.