

Making Storm Shutters

Simple to build and more attractive than plywood, these shutters are also easy to secure when the big one is closing in

BY JAKE EHLERS

Not long after moving to Florida, I was caught by surprise when hurricane season arrived and storms began stacking up in the Atlantic like freighters waiting to get into the Port of Miami. Where I grew up in the Midwest, we had tornadoes, and there was no getting ready: You just ran for the basement and hoped for the best. With hurricanes, you have time to prepare.

When Hurricane Georges had moved to within 36 hours of South Florida, I decided that it was time to get ready. I had invested way too much sweat and money restoring my house not to protect it. So along with everyone else in the state of Florida, I headed for the closest lumberyard to fight for my share of that most precious of commodities: plywood. The scene at the lumberyard put me in mind of the fall of Saigon, but I managed to remain calm. Eventually, I was able to get the plywood that I needed to protect the house and haul it home, but putting it up was another matter. Just as gale-force winds began to pick up, I found myself atop a 24-ft. extension ladder, wrestling a full sheet of 1/2-in. plywood into place to cover up the first of many second-story windows.

And when my work was done and I was ready for the worst Georges had to throw at me—nothing. The storm stalled and headed back to sea. That's when I realized I was going to have to climb up the ladder and take down all that plywood. The plywood stayed up for the duration of the hurricane season; for two months, we lived in darkness. With



Easier than carrying plywood up a ladder. Closing two shutters and sliding a 2x4 through a set of brackets are all it takes to secure this window against an approaching hurricane.

God as my witness, I vowed this would not happen again.

Closing up should not be a life-threatening experience

The next year, my wife and I decided to install hurricane shutters: That way, whenever a storm with a name was threatening, I could just climb the ladder, secure the shutters and be done with it. It was also important for me to know that if I were out of town, my wife or a neighbor could close up the house without risking life or limb.

Before I decided to build my own, I went to a store that specialized in manufactured hurricane shutters and checked the available options (sidebar facing page). Hinged wooden (colonial-style) shutters were attractive but also expensive; the salesman compared them to "little custom-made doors." The other options included metal accordion shutters that run up and down inside a track (expensive and unsightly) and removable corrugated-metal storm panels (less expensive, but only slightly less inconvenient than plywood). Failing to find an acceptable compromise between cost and appearance, I decided that I would simply build the shutters myself.

Shutters are modeled after those on a local estate

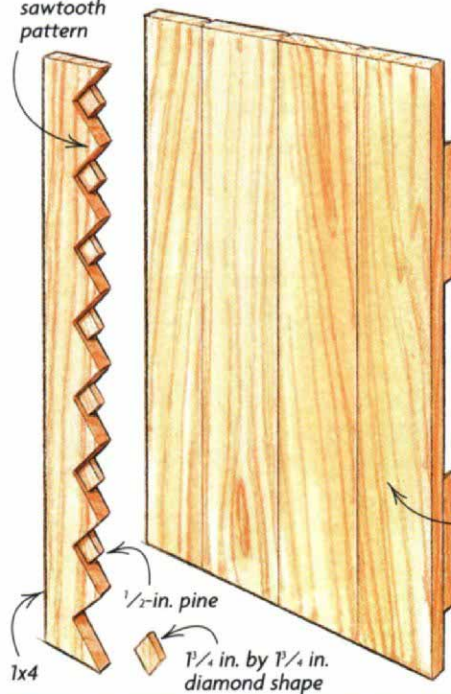
My house is stucco over concrete block with steel casement windows and a barrel-tile roof. The house was built in 1931 in a community of tree-lined streets where the houses are a mix of old Spanish and art-deco styles. These

houses were originally built as winter homes. When they weren't in use, they were shuttered up, usually by a modest set of hinged shutters that swung from each side of the window. Sadly, because of the changes these houses have undergone as they've been converted to year-round dwellings and because of decades of unusually low hurricane activity, no original shutters remain.

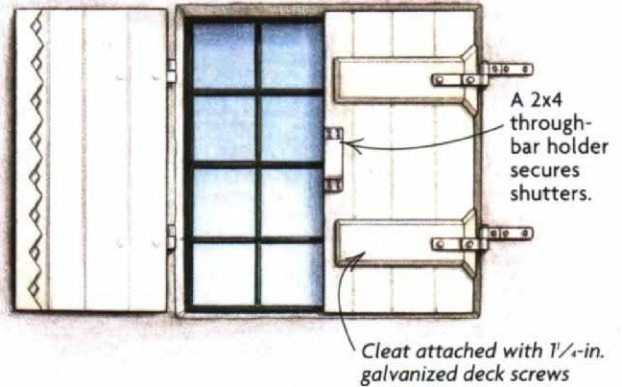
Fortunately, I was doing restoration work on an estate that was built in the same year as my house when I found shutters I liked. Despite the lavish nature of the main house,

Art-deco stylings add pizzazz to basic boards

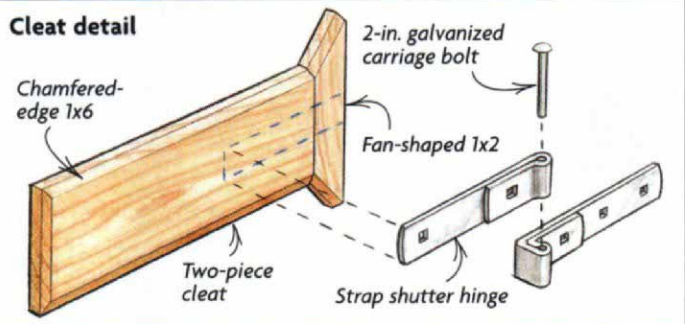
Decorative sawtooth pattern



Modeled after shutters found on one of Miami's art-deco landmarks, the sawtooth trim and flared cleats help to disguise the simple construction and utilitarian nature of the shutters.



Cleat detail



its windows are protected by simple board-and-cleat shutters.

Sawtooth detail adds interest to off-the-rack pine

I used 1x6 tongue-and-groove yellow pine for the shutter panels (drawing above). After cutting the boards to length, I ripped the groove off the first board to make the hinged edge, added a couple of full-width pieces for the field, then ripped the board for the meeting edge.

I used bar clamps to hold the assembly in place until I could fasten the two cleats that would unite them. Each cleat was basically a piece of 1x6, cut about 3 in. shorter than the width of the shutter. To give the shutters a more deco appearance, however, I added a fan-shaped 1x2 onto the hinge side of each cleat. After both parts of the cleat were securely fastened with construction adhesive and galvanized screws, I chamfered the edges of the cleats with a router.

The sawtooth decoration was the most complicated part of the process because it involved two different sets of teeth. I drew the pattern for the primary course of teeth on a 1x4 using a framing square; then I cut out the teeth freehand with a jigsaw and cleaned up the cut with a chisel. I made the thinner secondary course of teeth by applying individual diamond-shaped blocks between the

Sources of manufactured storm shutters

If you don't want to make your own shutters, a lot of companies will be happy to do it for you. Options range from fashionable wooden shutters to utilitarian metal panels. Listed below are some manufacturers found by searching the Internet.

ALL BROWARD HURRICANE PANEL INC.
450 W. McNab Road
Fort Lauderdale, FL 33309
(800) 432-1803

COULTER HURRICANE PRODUCTS
P. O. Box 660508
Miami, FL 33266-0508
(800) 533-4869

JACKSON'S SHUTTERS
P. O. Box 385
Hardeeville, SC 29927
(843) 784-5447

LUHRS ENTERPRISES
P. O. Box 8098
Bayamon, PR 00961-8098
(787) 798-0881

ROLLINGSHIELD
8900 NW 119th St.
Hialeah Gardens, FL 33018
(800) 474-9404

ROLSAFE
5845 Corporation Circle
Fort Myers, FL 33905
(800) 833-5486

SEAVIEW INDUSTRIES INC.
3789 NW 46th St.
Miami, FL 33142
(305) 633-9650

Vs of the primary teeth; these blocks were cut from 1/2-in. pine using the miter gauge on the table saw. I glued these parts with exterior glue and pinned them with a brad nailer.

Low-tech fasteners guarantee shutters stay shut

I mounted the shutters using old-style strap shutter hinges I'd saved from previous restoration jobs. The hinges are through-bolted to the shutters using 2-in. galvanized carriage bolts and securely anchored to the masonry wall with three 1/4-in. by 2 3/4-in. Tapcon screws (ITWBuildex; 800-284-5339).

The shutters are held open with traditional S-shaped shutter dogs that are mounted beneath the outer edge of each panel. To hold the shutters closed while the storm rages, I experimented with a number of elaborate fastening systems before finally settling on a low-tech approach. My solution was to use a set of bar holders (like you'd use to secure a barn door) and a 2x4.1 mounted hardware (National Manufacturing; 888-628-6584) to the inside strike face of each shutter. The bar holders can't be seen when the shutters are open, but when I have to close them, I slip a precut 2x4 through the opening. The tight fit ensures that nothing will move until I say so. □

Jake Ehlers is a builder and writer who lives in South Florida. Photo by Simon Hare.