

Folding aluminum arms guide and support the canvas as it unrolls and retracts.



Shady Business

At the push of a button, motorized awnings give shelter from the sun

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rom their North Salem, New York, farmhouse built atop the west face of a knoll, Anthony and Brenda Maddaluna and their family enjoy views of a horse barn, pastures bordered with split-rail fencing, a pond, and spectacular sunsets. The only disadvantage, as they discovered after buying the place two years ago, was that while their covered front porch provided some shade in the summer, it wasn't nearly enough to vanquish the heat and eye-dazzling sunlight that poured in each afternoon. "We baked out there," says Brenda. It also got too warm indoors, Erika, 18, and James, 16, complained. The solution arrived one day by mail: an advertisement for the services of a custom awnings company.

Unfurled over large windows, a terrace, or a porch, awnings have provided cool cover for centuries, dating at least as far back as classical Greece. A standard feature in European villas and cafés since that time, they didn't see the light of day in America until the late 1800s, when architecture firms such as McKim, Mead & White dressed up many of their grand seaside manses with crisp canvas in the European manner. With the advent of air-conditioning after World War II, however, these protective coverings fell out of favor here.

BY DIANE DICOSTANZO

In these energy-conscious times, awnings are popular once more, not only for their restful shade and decorative flourish but because they can reduce heat gain by 77 percent, lowering indoor air temperatures by as much as 15 degrees. This can in turn translate into decreased air-conditioning costs. "They make the air cooler and the light softer inside," says Tom Ginty, of Durkin Awning Corporation, his family-owned company in Danbury, Connecticut. Less light also means less fading of indoor furniture.

The state-of-the-art difference today is that, more often than not, awnings are motorized rather than operated by a hand crank. Not only does mechanization save time and homeowner energy, it actually makes the coverings more useful. "With a motor, you can span spaces of up to 45 feet. Anything wider than about 15 feet makes manual operation difficult," says Ginty. Plus, according to industry sources, motorized awnings are used 50 percent more often than manual ones are. (Though as backup, all motorized systems also come with a crank, allowing manual operation—during a power outage, for instance.) The fabric, too, has evolved. Today it tends to be acrylic—weather- and fade-resistant and easier to clean than traditional pure cotton can-

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vas, which degrades more quickly and, when damp, provides a more fertile breeding ground for mold and mildew.

As it turned out, the Maddalunas' 36-foot-wide porch area was a prime candidate for motorized awnings, as Bill Ginty (Tom's brother), concluded during an on-site consultation. The 10-foot-high roofline would permit awnings a generous 11 feet deep while still allowing for clearance of at least 7 feet under the front bar, their lowest point (awnings slope down and away from the house at a pitch of 2 feet 6 inches per 10 feet to encourage rain runoff). "Any less than that and the space will feel claustrophobic," Bill Ginty notes. While awnings are typically hung from a wall or, as in the Maddalunas' case, from the ends of roof rafters, an additional 18 inches or so in height can be provided by mounting them on the rooftop.

Given the width of the expanse to be sheltered, a single awning would have been too unwieldy, so Ginty specified three 12-foot-wide awnings, each operated by its own motor. At the touch of a button on the wall or an optional hand-held remote, the Maddalunas' canvas would extend and retract, rolling up completely around a tube. (For a detailed look at how each part functions, see "Unfurling Those Flying Colors," below.) The awnings could also be stopped at any point in between, for a mixture of sun and shade. Brenda chose forest-green fabric and white aluminum hardware to blend in with her house. "With the awning retracted, all you see is the scalloped green edge of the fabric under the eaves of the porch," she says.

Because of the awnings' size and weight (about 525 pounds total), the Maddalunas' system required steel rather than aluminum



Stretched along the 36-foot western facade, awnings are unobtrusive when retracted.

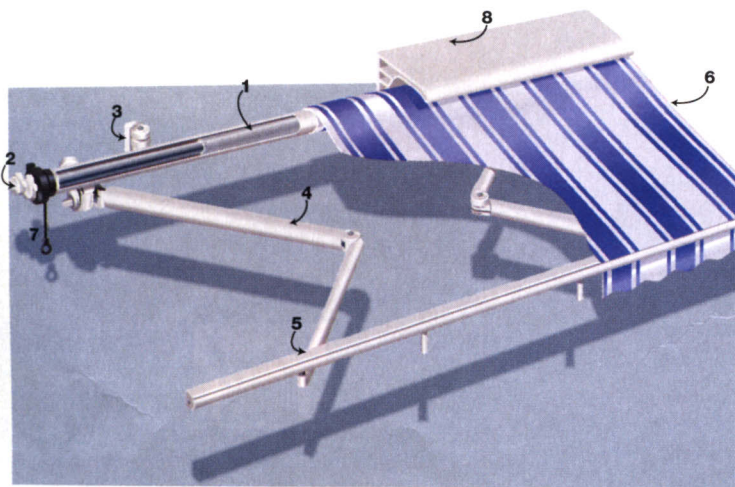
torsion bars, the "backbone" that supports the rest of the system. Quiet, top-of-the-line tubular motors would be inserted inside the roller tubes.

To protect their awnings from damage in gusty weather, the Maddalunas opted for wind sensors: two small plastic whirligigs, placed atop either end, that turn when breezes blow. When the preset maximum velocity is reached—usually above 25 mph—the awnings automatically retract. But because they can't read the up- or downdrafts that often accompany storms, wind sensors aren't an adequate safeguard in very gusty weather, Tom Ginty warns. As a rule, "When it gets too windy to enjoy being out of doors, then you should go in, and so should your awnings," he says. To prevent damage from sudden violent drafts, awnings should be furled when not in use.

A hand-held remote control (\$50) allows the Maddalunas to adjust their shade at will. To prevent children from playing with the device, Ginty advises choosing one with a touch pad that requires the operator to key in a security code. Because they chose wind sensors and remote control, the Maddalunas needed to install a programmable junction box; this can add \$200 to \$700, depending on the area of the country and the wiring needed. The Maddalunas' system cost a total of \$10,000, including labor.

Today, under the sociable flap of forest-green canvas, the porch is hang-out central for the Maddaluna parents, teenagers, and their friends. Now Brenda is adding a slate patio that matches her porch floor to the grounds in front, expanding her open-air living room by another 100-or-so square feet. "Let the sun beat down—we've got it made in the shade," she says happily. ■

UNFURLING THOSE FLYING COLORS



The components of a motorized awning system include: (1) A roller tube that serves as a spindle around which the awning fabric wraps. Contained within is a cylindrical motor (2); it has one electrical cable that plugs into a standard 110-volt outlet or can be wired to a junction box. Supported by aluminum brackets (3) that attach the system to the house, a rectangular torsion bar (unseen) runs behind the tube and serves as the backbone of the awning. The elbow-jointed, spring-loaded retractable arms (4) attach at one end to the torsion bar and at the other to the aluminum front bar (5). As the motor unrolls the fabric or pulls it back in, the arms keep the cloth level, exercising a constant tension. When closed, the arms fold flat beneath the torsion bar. The awning canvas (6) is usually acrylic, chosen for its durability and colorfastness. (7) In case of a power outage, a gear eyelet can be fitted with a hand crank (included). The protective plastic hood (8) is optional.