



The ongoing test of teak caulks includes tests for chemical resistance, left above. The panels will be regularly doused with certain chemicals and monitored to see how they hold up. To test adhesion and strength, the caulks were dolloped onto teak squares fitted with metal eyes, center above, which were weighted down and monitored. For the test, PS used new teak panels, right above.

Sticking it to Teak Caulks

Sealants facing adhesion, strength, and elasticity tests.

Tests were designed to comparatively evaluate how well each product delivers on the four basic qualities anyone choosing a teak deck caulk would want: ease of application, adhesion, durability, and resistance to chemicals.

To compare ease of application, we applied the products to seven 9-inch teak “planks” (2 inches wide x a ½-inch thick) each containing a single square seam, a ¼-inch deep by a ¼-inch wide, running the length of the plank to simulate a typical teak deck seam. The seam in each plank was prepped and caulked as per manufacturer’s instructions, while noting points such as seam preparation requirements, ease of application, and other observations made during application. After 14 days (to allow plenty of cure time), the panels were placed outdoors and fully exposed to the weather, where they’ll be monitored over the course of two years to gauge product durability.

It’s important to note that when testing caulks with an expected/hoped-for life expectancy of 10 to 15-plus years, the question of how long each caulk will last most likely won’t be definitively answered in a

two-year period. What this portion of the test will provide, however, is an opportunity to carefully observe each caulk for a set length of time for short term problems that may be indicative of long-term performance.

CHEMICAL RESISTANCE

Sixteen teak panels 8 inches x 4 inches are the platform for testing product resistance to the various chemicals a teak deck likely will be exposed to over its lifetime. All panels contain a 4-inch bead of each product tested, each applied per manufacturer instructions. Of these panels, 13 will be exposed to a single chemical, while the 14th will be exposed to all chemicals used in the test—the 15th panel will be exposed to no chemicals.

Chemicals used in our test include gasoline, diesel, motor oil, ammonia, household bleach, Cetol Marine Oil, Acetone, Starbrite Teak brightener (containing Oxalic acid), WD-40, brush cleaner, Fantastic, Murphy’s Oil soap, MEK, and a heavy-duty bilge cleaner from West Marine. For added fun, fish blood and oil will be applied.

After a two-week curing period,

all panels were moved outside, fully exposed to the weather, and given the initial dose of their respective chemicals, which will be applied monthly thereafter and in such a quantity as to thoroughly saturate each caulk bead and the test panel surface. Panels will be monitored regularly over a two-year period to see how well each product holds up.

ADHESION, STRENGTH, AND ELASTICITY

This test panel consists of a 2-foot teak plank 4 inches wide and 1 inch thick, upon which seven 2-inch-x-2-inch squares of teak were mounted with walnut sized gobs of each caulk tested, once again following manufacturer directions for surface preparation on new teak. The panel was kept indoors for four weeks for curing, then it was placed outdoors and fully exposed to the weather. Each square has a mechanically fastened eyebolt to which a three-pound lead weight was attached (these will be increased monthly in 3 pound increments). The samples will be checked monthly for any signs of failure.