

A superior fiber cartridge, rain or shine



Contractors are focused on completing their job on time, on budget, and to high standards. A fiber cartridge that provides resistance to weather conditions allows contractors to focus on getting their job done instead of wasting time, money, and resources by halting work to replace ruined cartridges exposed to the elements.

Using Sonoco's Sonotube® construction form technology, Sonoco's RainGuard® adhesive and sealant packaging incorporates a proprietary high-strength, water-resistant fiber cartridge that resists damage from wet weather without a negative impact on gunnability.

This technology was developed in response to extensive market research on the unmet needs and issues facing construction sites. Contractors most frequently mentioned rain or inclement weather as the top issue that inhibits their ability to complete a job within the committed timeframe. With Sonoco's RainGuard technology, you can minimize this concern and make their job easier.

Insight

Replacing caulk cartridges thrown in the back of a truck mid-construction job is costly and wasteful for contractors.



Solution

A fiber cartridge that can survive outdoor conditions without package damage/loss of gun-ability.



Benefits

- | Package withstands rain, sleet and snow
- | Fewer retail returns due to weather damage
- | No effect on cartridge performance

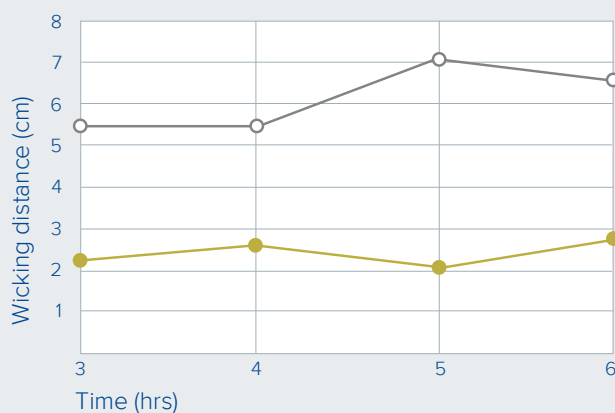


Strong performance in tough conditions

RainGuard® technology was developed to resist inclement weather, surviving outdoor storage without degrading the strength of the cartridge or the ability to gun adhesives and sealants.

To demonstrate and compare performance, Sonoco inserted plungers into RainGuard cartridges and standard construction control cartridges. Both were fully submerged in water for up to 6 hours.

Wicking comparison

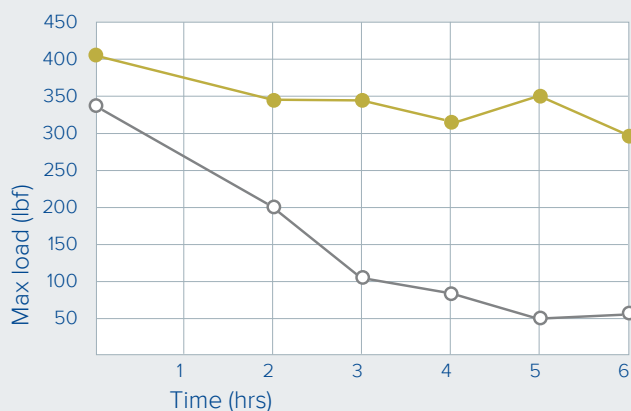


● RainGuard non-hermetic ○ Control non-hermetic

Water wicking

Water wicking critically impacts strength and gunnability. In the control cartridges, water started to wick from the cut edge of the cartridge past the plunger toward the spout. The water wicking distance of the RainGuard cartridge was consistently less than half that of the controls. Throughout the test, the water never wicked past the plungers in the RainGuard cartridges.

Axial compression comparison



● RainGuard non-hermetic ○ Control non-hermetic

Axial compression

Cartridge strength is critical to performance, especially after exposure to water. The RainGuard cartridges exhibited a very gradual decline in strength, and after 6 hours of complete water immersion they still demonstrated close to 90% of the strength the control cartridges showed before they were exposed to water.