

VINYL FORMULATION EXPLANATION OR "THICKER IS NOT BETTER"

Developing the Ideal Pool Cover Fabric Cover-Pools Inc. has been manufacturing pool covers for over 40 years, and in our early years we tested almost every type of cover fabric imaginable. After that initial trial and error we decided to become directly involved in formulating a material specifically for use in a pool environment. We chose Herculite Products as our partner in development. Herculite has long been known for developing materials for custom uses including military, medical and consumer products. We began by researching pool chemistry and its effects on different components of the vinyl. Herculite's chemists and Cover-Pools' owners visited pools and covers all over the United States to examine the regional and chemical effects of a pool on different vinyl formulas.

From this research we developed and produced an exclusive material formula that Cover Pools has been using for over 20 years, with only minor modifications as technology improves. Every component of the vinyl cover is made in the United States from the best products available. We have thousands of pool covers that prove our material will last as expected. Since we purchase such a large quantity of cover fabric, Cover-Pools is the first stop for all of the fabric producers when they have a new product to introduce and we still test new materials coming on the market. However, we have not yet found a product better than our current exclusive fabric formula.

Laminate vs. Coated Vinyl Construction Most of our competitors use a "coated vinyl"; Cover-Pools uses a "laminated vinyl". Our laminate is more expensive to produce for the following reasons. Coated fabric is made by drizzling molten vinyl over a tightly woven "scrim" (reinforcing thread) and knifing (smoothing) the vinyl to cover the scrim. The scrim must be tightly woven to prevent the molten vinyl from leaking through. Coating creates a great bond between the scrim and vinyl and is typically used in truck tarps because they have to resist flapping in the wind. However, the coating can be very uneven which causes the scrim to be close to the surface of the cover and possibly exposed to water and abrasion sooner. Laminated fabric begins with two identically thick extruded sheets of vinyl that are adhered and pressed on a scrim with open spacing between the threads. While laminates are not a good product for truck tarps, they are excellent for the pool environment because of the uniform vinyl surface and adhesive additives that protects the thread reinforcing from water or abrasion.

Fabric Specifications Reinforced vinyl (vinyl with thread reinforcing) is classified by weight per square yard. Cover-Pools uses 16- and 20-ounce vinyl (ounce per square yard). Since weight is difficult to compare when holding a fabric sample most people compare thickness. A coated material can appear thicker due to the thick scrim but compared ounce per ounce the laminate will have vinyl as a greater percentage of its weight as vinyl than scrim.

Testing and Tear Resistance The scrim in a cover is added to prevent tearing and to give the vinyl strength. You might be surprised that our 16-ounce laminated vinyl has better tear resistance than a coated fabric weighing 18 ounces. Using ASTM Test # 191-5134 for tear strength, Cover Pools fabric-test results for tear strength are 100 lbs \ 95 lbs. A coated fabric used by other cover companies has the tear strength of 100 lbs \ 80 lbs. The two numbers represent "warp and fill", or tearing in either direction with the scrim pattern. One of the reasons our material is stronger is because of our "weft-inserted thread" running diagonally through the scrim weave. This provides a rip-stop protection not available in coated fabric. If scrim becomes exposed to the pool water it can break down; this weakens the cover, allowing water to migrate down the thread and subsequently causing the cover to fail. The tighter, thicker scrim in a coated fabric will allow more water to be absorbed once the vinyl has been worn off, which causes the cover to fail sooner than our laminate vinyl with its weft-inserted thread. If you look closely at the vinyl samples, we hope that you will see these differences and therefore appreciate the extra expense and research that has gone into making your new cover.

