

Determining the Right Product for the Job

Five years is a long time for a graphic to be outdoors. You can be confident that Mactac isn't overpromising when it comes to warranty and recommended applications. At Mactac, we extensively test all of our materials before assigning a durability specification, so you can be confident that under normal use, your graphic products will last and look good for years.

Before launching a product into the market, several tests are done in-house to validate the performance. These include Weather-Ometer testing (WOM), UV light transmission, tack and peel, elongation, and abrasion to name a few. These benchmarks are what we rely on to populate our performance guides and technical assistance bulletins. Recently, the R&D labs at Mactac performed a series of WOM tests to compare our economical PERMACOLOR PromoGard laminates to one of the industry's known competitors.

PERMACOLOR PromoGard

PromoGard is Mactac's economical short-term to medium-term laminate. Available in gloss, matte, and lustre these clear overlaminates provide years of image protection to printed graphics. Initially this series was benchmarked to last two years outdoors, and after years of field use we wanted to test our conservative durability estimate.

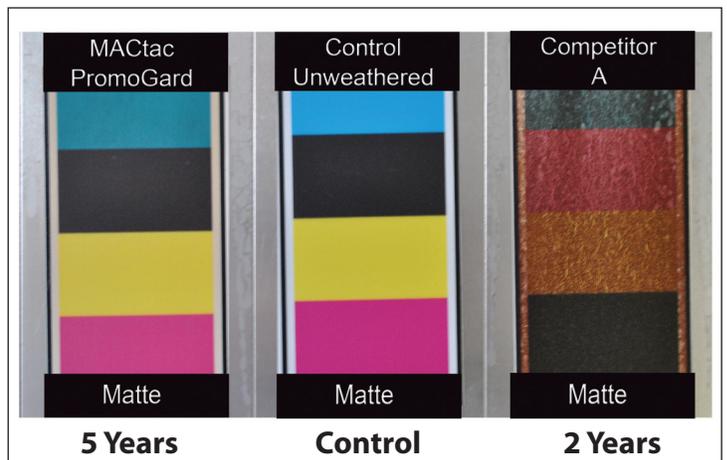
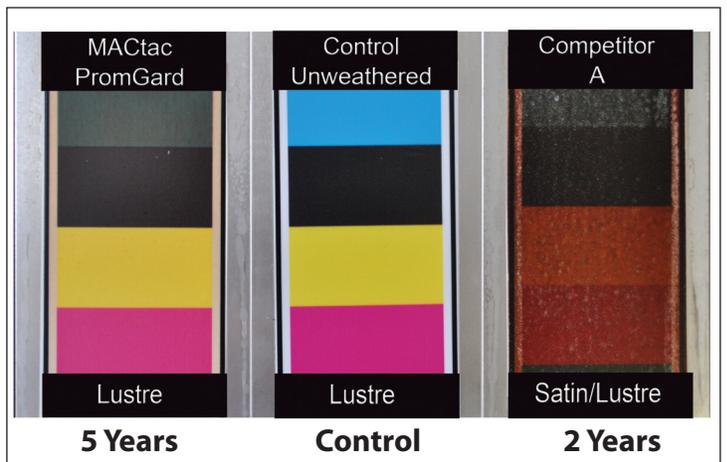
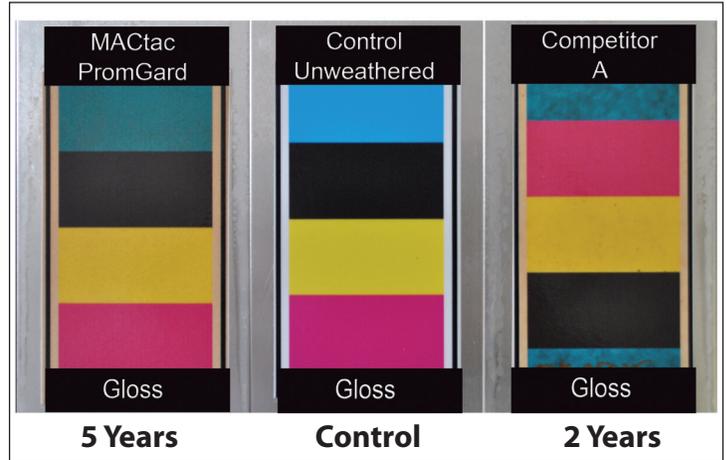
The Competition

The competitive product is also designed for at least two years outdoors and competitively priced. Also available in gloss, matte and lustre, the competitive product is known in the industry as an economic laminate. Since both materials were rated for the same durability, we also wanted to prove that the Mactac PromoGard is a superior laminate.

The Test

The idea of the test is fairly simple, we took a seven year white vinyl, printed CMYK swatches on it, and then laminated several samples with the PromoGard matte, lustre and gloss, and the corresponding competitor's laminate as well. A second sample of each was used to show the control (unweathered) result.

Each of the samples were mounted to a stainless steel panel and placed into the WOM. The intention was to weather these panels out to two years or until they deteriorated. The WOM replicates real world outdoor environments but speeds up the process by simulating intensified solar radiation using a Xenon arc lamp and temperature and humidity controls to produce accurate, reproducible and repeatable results for predicting outdoor service life.



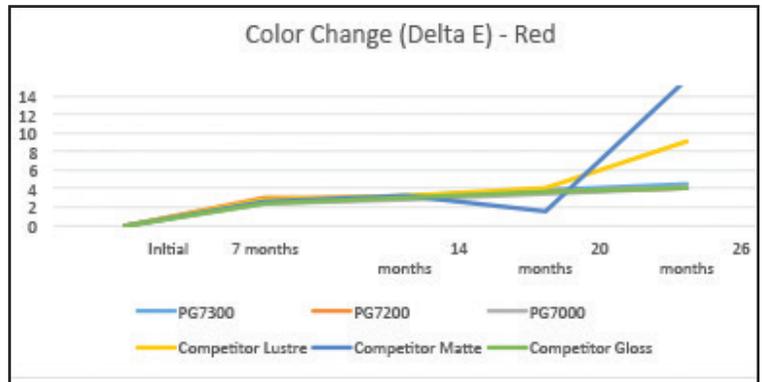
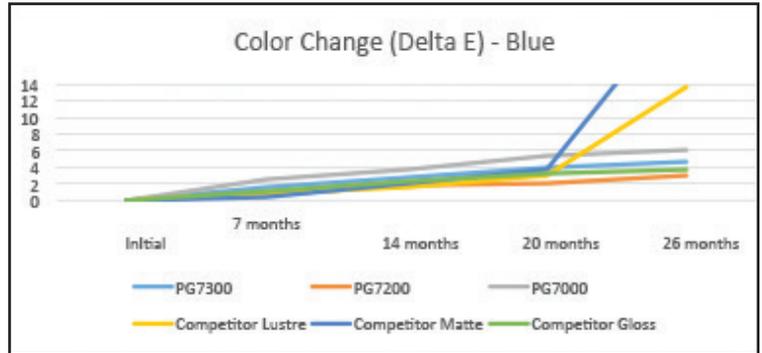
The Results

The results show that the competitor’s laminate started to fail at 17 months. In fact, after the equivalent of 6 months, the competitor’s laminates started to change as indicated in the charts. Because they were almost black at the two-year mark, the competitor panels were removed from the WOM. The PromoGard, on the other hand, was left in until the five year mark. You can clearly see the finish and the image underneath still look true. The Delta E graph illustrates the extreme change in appearance well before two years on the competitor samples but little change on the PromoGard. The graph was plotted using specific measures from each interval of testing.

Conclusion

The conclusion is that PERMACOLOR PromoGard clearly outperformed this competitor, and is a great choice for short to medium term graphics. There are several different grades of vinyl and adhesives in the market and it can be confusing and sometimes, as in this case, misleading, when it comes to expected performance versus actual durability.

Mactac has a long history of innovation and image protection, so you can be confident that Mactac specifications are fair and conservative. When choosing a graphic media or laminate, an educated consumer will know that value is not always determined by price. It is important to consider this when you are choosing products that represent your company and your brand.



PERMACOLOR®
PromoGard™

