

HDPE vs. Phenolic vs. SCRC

Bathroom Partitions

Understanding material differences
available for commercial bathrooms

Scranton Products® Hiny Hiders® High Density Polyethylene (HDPE) bathroom partitions provide one of the longest life cycles in the industry. Constructed from premium American-made 1" solid HDPE with a homogenous color throughout, Scranton Products® HDPE plastic resists dents, scratches, corrosion, graffiti & mildew and will absolutely never rust.

Two competing materials in the marketplace today are Solid Color Reinforced Composite (SCRC) and Phenolic bathroom partitions. Scranton Products® has performed laboratory testing that compares HDPE, SCRC and Phenolic to validate certain features & benefits and provide the industry with a clear understanding of the differences in materials.

Commercial bathroom partitions are placed into harsh high traffic environments. These environments tend to be damp making the materials within them susceptible to mold, mildew and rust. It is also not uncommon to encounter graffiti and vandalism in these public spaces, therefore it is important to invest in a worry-free product that will save you time and money.

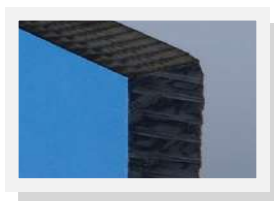
MATERIAL COMPARISONS



Weight: 165lbs*

HDPE

Solid Plastic color throughout



Weight: 167lbs*

Phenolic

Resin impregnated kraft paper



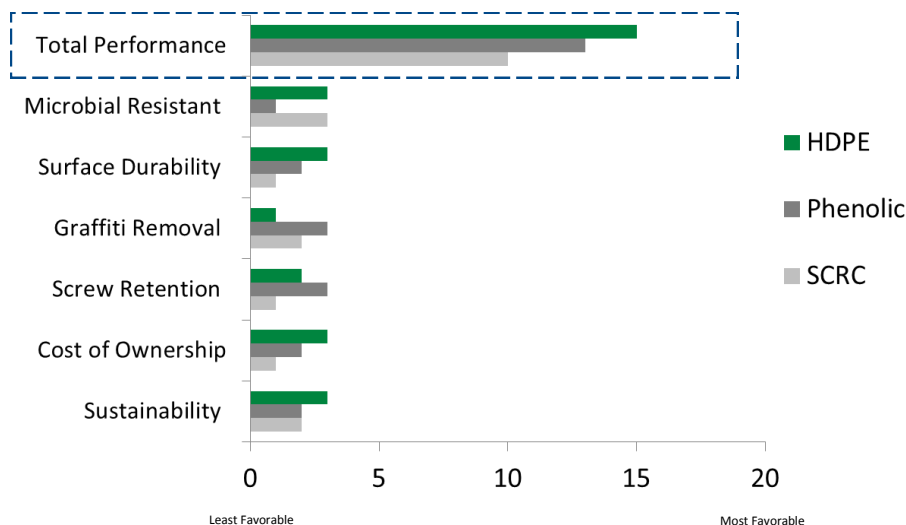
Weight: 207lbs*

SCRC

Fibers, dyes & resins with color throughout

MYTH: HDPE, Phenolic and SCRC bathroom partitions are manufactured from the same material.

FACT: High Density Polyethylene (HDPE) bathroom partitions are comprised of high density polyethylene resin & pigments. Phenolic bathroom partitions are comprised of a melamine sheet then multiple layers of resin impregnated kraft paper. Solid color reinforced composite (SCRC) bathroom partitions are made from a homogenous composite of cellulose fibers, dyes & resins with a GraffitiOff™ surface coating. Independent testing reveals Scranton Products® HDPE is a better material choice to withstand the harsh environments of commercial bathroom partitions.



Comparing the numerous laboratory tests throughout this document HDPE, Phenolic and SCRC were graded on a scale of 1–3, 1 being the least favorable and 3 the most. Testing shows that Scranton Products HDPE is the best material choice with a score of 15 out of 18 and then Phenolic with 13 out of 18 and SCRC with 10 out of 18.

*Weights are based upon a standard partition configuration. HDPE and SCRC panels and pilasters are 1" thick, Phenolic is comprised of 3/4" and 1/2" panels and pilasters.

MICROBIAL RESISTANCE

MYTH: HDPE, Phenolic and SCRC are all resistant to mold and mildew.

FACT: HDPE exhibited no microbial growth during the testing period. In just 21 days Phenolic had mold and mildew growth and a additional amount of growth within 28 days. Bathroom partitions are placed in environments where materials are susceptible to mold & mildew, therefore it is important to choose a material that is microbial resistant.

Material	14 days	21 days	28 days
HDPE	10	10	10
Phenolic	10	9	6
SCRC	10	10	10

Testing conducted in accordance with ASTM D3293. The results are shown in above. Samples were scored on a 0-10 scales, where 10 is the best microbial resistance. Test performed in 2013.

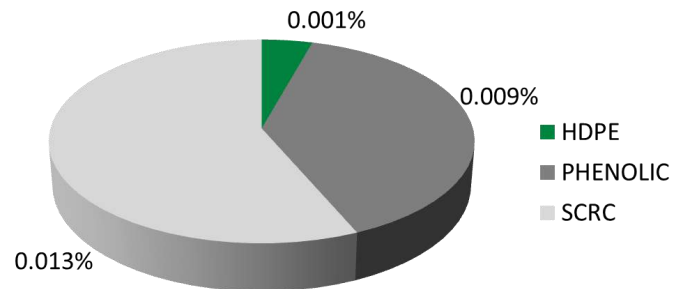
SURFACE DURABILITY

MYTH: Phenolic and SCRC bathroom partitions have a more durable surface than HDPE bathroom partitions.

FACT: HDPE has the best abrasion resistance with the lowest surface wear. Phenolic and SCRC have a higher surface wear indicating a lower abrasion resistance than HDPE. The test performed mimics the surface abrasion that would result from normal handling, cleaning or polishing. Once the surface of Phenolic or SCRC have been scratched or worn, stains may be more difficult to remove and some may leave a ghosting effect.¹

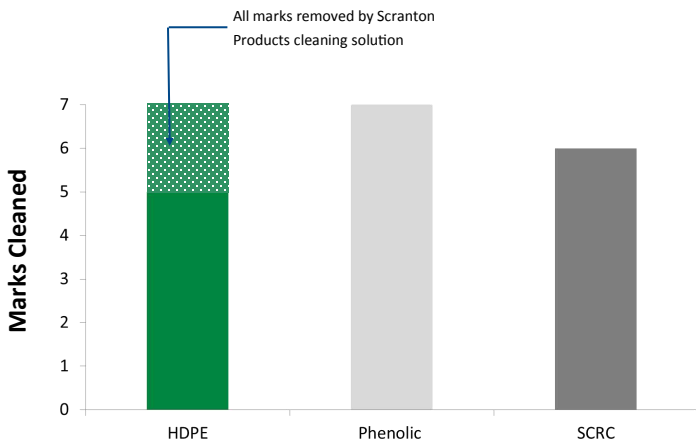
¹ Referenced from Bobrick Advisory Bulletin TB-60 Toilet Partition Cleaning & Maintenance

HDPE has the highest abrasion resistance



The abrasion resistance of various bathroom partition materials was measured in accordance with ASTM G195 using the CS-10 abrasion wheel. This wheel was selected for this test because of its mild to medium abrading action, like that of normal handling, cleaning or polishing. Testing performed in 2013

GRAFFITI RESISTANCE

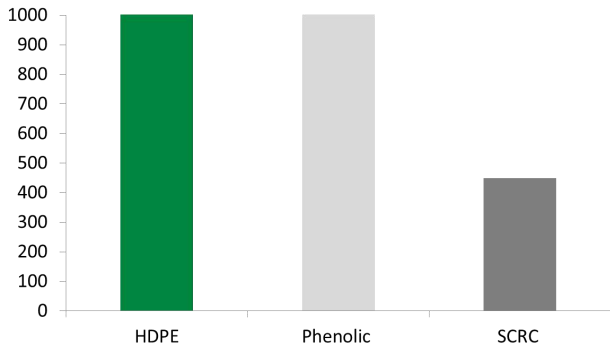


Testing was conducted in accordance with ASTM D6578. The test provides a standard set of conditions that can be used to evaluate the graffiti resistance of a surface. Seven marking agents and six cleaning products were used in the evaluation. Testing performed in 2013

MYTH: Phenolic and SCRC bathroom partitions have better graffiti resistance under all circumstances than HDPE bathroom partitions.

FACT: Using Scranton Products® recommended environmentally friendly cleaning solutions graffiti was removed in all instances from HDPE. It should be noted that both Phenolic and SCRC have an exterior coating to prevent graffiti that may deteriorate over time and may require specialized maintenance such as waxing. HDPE, on the other hand does not have an additional coating and no specialized maintenance procedures are necessary.

SCREW RETENTION



Using a tensile tester, the force required to pull a (9" x 2.5") screw fastener from the bathroom partition material was measured. Test performed in 2013

MYTH: HDPE, Phenolic and SCRC bathroom partitions have the same screw retention capabilities.

FACT: Test results show that HDPE performed with very high screw retention. In a laboratory test using the same fastener type for comparison, SCRC testing failed at less than half the pull force to remove the same fastener. A portion of the SCRC surface broke free during the test (see photo below), exposing the inner layers of the material.



HDPE



Phenolic

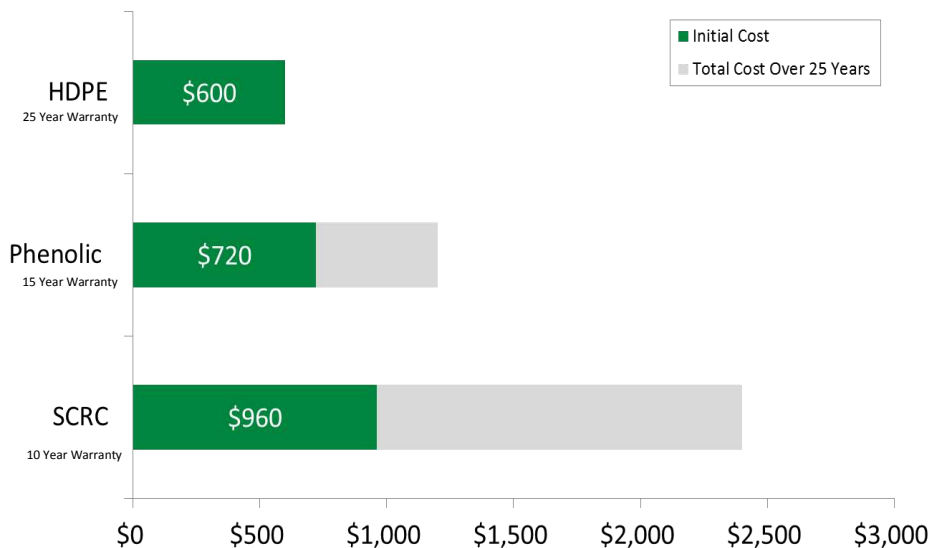


SCRC

TOTAL PRODUCT COST VS. LENGTH OF WARRANTY

MYTH: Phenolic and SCRC bathroom partitions are only slightly more expensive than HDPE bathroom partitions.

FACT: Scranton Products® HDPE has the lowest initial cost and provides the lowest cost of ownership due to its performance, durability and long warranty. HDPE costs significantly less than the other two materials over a 25 year period.



The total cost over 25 years is based on replacing partitions at the end of their warranty period.

SUSTAINABILITY



MYTH: Phenolic and SCRC bathroom partitions are as sustainable as HDPE bathroom partitions.

FACT: HDPE is 100% recyclable and is available with up to 100% post-consumer content. Scranton Products™ HDPE material has 25-100% pre-consumer content. Phenolic and SCRC are not available as 100% post-consumer and are not recyclable. SCRC does not contain any pre-consumer content. HDPE does not contain any added Urea-Formaldehyde resins.

Category	HDPE	Phenolic	SCRC
Recyclable	Yes	No	No
Post-Consumer Recycled Content	0%, 100%	0%	0%
Pre-Consumer/Post Industrial Recycled Content	25-100%	22%	0%
Low Emitting Materials	Yes	No	Yes
Free of Added Urea-Formaldehyde Resins	Yes	No	Yes

THE COMPLETE LINE OF
SCRANTON PRODUCTS

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