



What is Solid Phenolic

It is well known by those within the phenolic industry that the lifecycle of solid phenolic panels and products exceeds that of similar building materials but to those outside the industry or who have never incorporated phenolic products into their designs, here is what you should know about phenolic and how it translates into a longer lifecycle.

What is phenolic?

Phenolic panels start out as paper, similar to a paper grocery bag or children's construction paper. Melamine-impregnated decorative surface papers are layered with phenolic resin treated kraft papers and pressed into panels from 1/8" up to 1".

What is phenolic resin?

Phenolic resin is produced from an organic compound of plant life and tree sap. Phenolic resin saturates the kraft paper and when heated and pressed, produces solid phenolic panels. The organic phenolic compound acts as a bonding agent, but does not contain the formaldehyde or VOCs that are found in some epoxy resins.

Now that we have a basic understanding of phenolic panels, let's discuss the lifespan.

The American Society for Testing and Material (ASTM) proved the durability of phenolic by conducting a series of tests that compared phenolic to metal, plastic, laminate, hardwoods and stainless steel. Phenolic surpassed nearly every competing material in the ASTM tests which tested impact, scratch, graffiti resistance, and smoke and flame spread.

How does this translate to your next design?

Solid phenolic panels have a typical life cycle of more than 20 years. Compared to alternative materials phenolic's lifecycle costs are far superior. The heavy-duty surfaces result in little to no maintenance. The smooth, adhesive-free surface does not require special attention or chemicals while cleaning, resulting in minimal maintenance.

Not all phenolic is created equally?

The lifecycle of solid phenolic panels and products can differ from manufacturer to manufacturer because not all phenolic products are created equal. At National Toilet Partitions, we go to great lengths to ensure that our panels are stored, machined and fastened correctly. In addition, we invest in the talent, technology and years of experience required to master a level of craftsmanship that achieves optimal results when fabricating phenolic products.

Please see the following drawing on how phenolic is constructed

