

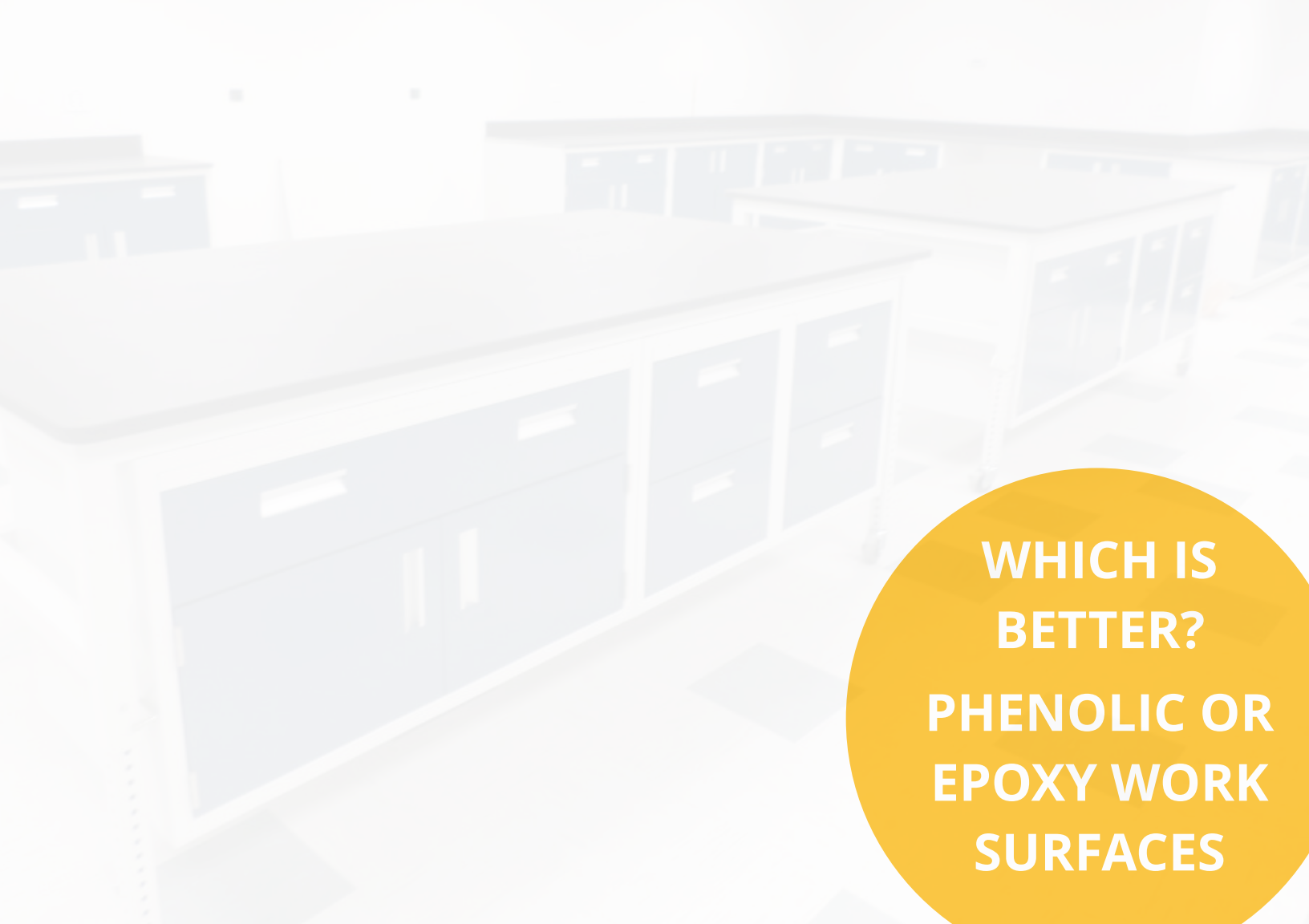


WHICH IS
BETTER?

PHENOLIC OR
EPOXY WORK
SURFACES

Frequently Asked Questions





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Things to Consider When Selecting The Best Work Surface

Considering Phenolic or Epoxy for your worktop or cabinetry application? Architects, B2B engineers and procurement personnel very often find themselves choosing between these two scientific surface solutions. What follows are 10 things to consider when making a selection.



Peerless Hi-Temp Fabrication can help you make the right decision for your company and fabricate to your specifications using our licensed state-of-the-art CAM/CAD software program.

Fabrication Services



We are a fabricator of a wide range of specialty insulation products and boards. Sold worldwide to aluminum, steel, glass, furnace, refractory, electrical and petrochemical Industries.

We fabricate insulation boards, panels, blankets and rolls as well as laboratory surfaces.

We offer a wide range of laboratory counter-tops and surfaces. These surfaces are used in laboratories, classrooms, and offices.



PHENOLIC VS. EPOXY

1

Cost

A black Epoxy resin board costs approximately 15% more per square foot than phenolic resin.

Advantage: Phenolic

2

Lead Time

Lead Time for standard colors of Phenolic and Epoxy resin tops are 1 to 2 weeks.

Advantage: Push

3

Warranty

Standard conditional warranty is 10 years for both Phenolic resin and Epoxy resin.

Advantage: Push

4

Color Options

Phenolic colors are the same price with the exception of speckled grey which is an up-charge.

Epoxy colors other than black fall into 3 tiers, each carrying an upcharge ranging from 10% to 25% over the previous tier.

Advantage: Phenolic

5

Seniority

Epoxy resin surface tops have stood the test of time as the standard for lab-grade work surfaces for decades whereas phenolic resin surface tops are not as seasoned.

Advantage: Epoxy

6

Sustainability

Phenolic resin uses recycled wood fibers as the bonding agent for the resin which is non-toxic when fabricated whereas Epoxy resin uses silica, which is a carcinogen that is toxic when fabricated.

Advantage: Phenolic



PHENOLIC VS. EPOXY

7

Machineability

Epoxy resin can be more difficult and time-consuming to fabricate due to its heavier weight coupled with requiring diamond tipped tooling. Phenolic resin can be easier on machinery due to its wood fiber consistency and is able to be fabricated with standard wood tooling.

Advantage: Phenolic

8

Weight

Phenolic resin weighs approximately 10 pounds per square foot whereas Epoxy resin weighs over 11 pounds per square foot. More weight means more shipping costs!

Advantage: Phenolic

9

Chemical Resistance

Both surfaces are non-porous and highly resistant to chemicals. A comparison of chemical resistance of epoxy resin vs. phenolic resin yielded similar effects in many areas with the exception of certain (Acetone, Phosphoric Acid 85%, Sulfuric Acid 25% to 33%) where phenolic resin showed no detectable change in the material surface and epoxy resin showed slight detectable change in color/gloss but no change in function or life of the surface.

Sulfuric acid 96% showed slight detectable change in color/gloss but no change in function or life of the phenolic surface versus epoxy surface which showed an objectionable change in appearance due to discoloration or etching.

Advantage: Phenolic

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Heat Resistance

Phenolic resin counter tops can withstand temperatures up to 350 degrees Fahrenheit whereas Epoxy resin can handle temperatures over and above 350 degrees Fahrenheit, including some epoxy that can withstand temperatures up to 600 degrees Fahrenheit.

Advantage: Epoxy



"Which one is better? It depends on your application. Epoxy resin surfaces have a longer track record and are capable of handling higher temperatures; however, Phenolic resin surfaces are a more budget-friendly and eco-friendly alternative that lends itself to excellent machinability and customization."

-Jon Gentile, Peerless Hi-Temp Fab

Contact us for information.



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