

# Phenoline® Pileguard

Proven performance in the post-coal tar epoxy era

## Moving away from coal tar epoxy (CTE)

Negative environmental and health impacts plus proven performance shortcomings make it clear: It no longer makes sense to use CTE coatings for long-term corrosion protection of submerged assets including sheet piling.



## CTE is yesterday's solution

CTE coatings have enjoyed a decades-long reputation for cost-effective corrosion resistance in seawater immersion. But CTE products, including Carboline's **Bitumastic 300 M**, fall short because:

- Faster UV degradation leads to more frequent maintenance reapplication
- High VOC and HAPs loads do not comply with strict global environmental rules
- Viscous CTE coatings are harder and more complicated to apply vs. modern epoxies
- CTE coatings lack the aesthetic appeal of modern epoxies
- Cheaper CTE coatings cost more to own over time due to shorter lifespan and increased maintenance needs



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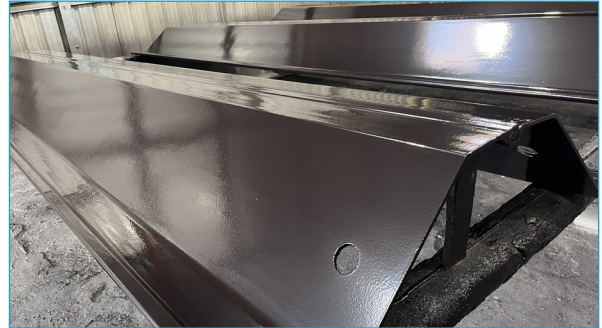


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## Comparison vs. CTE

**Phenoline Pileguard** is a 100% solids, very-low VOC epoxy coating exhibiting exceptionally durable corrosion protection of substrates in harsh marine or industrial immersion service. This premier modern epoxy outperforms legacy CTE products for the following key benefits:

- Longer lifespan in seawater, chemical, and corrosive material immersion
- Very-low VOC formula significantly reduces pollution and human health impact
- Easier application and improved adhesion reduce labor time on site
- Cures to a smoother, glossier finish for improved visual appeal of high-profile structures
- Lower total cost to own vs. high-maintenance CTE products for better overall value



Phenoline Pileguard vs. common CTEs		Bitumastic 300 M	Competitor A	Competitor B
DFT per coat	12-30 mils	16-24 mils	8-19 mils	8-16 mils
Abrasion resistance <sup>a</sup>	96 mg loss	130.4 mg loss	>100 mg loss	>100 mg loss
Adhesion <sup>b</sup>	3500 psi	1443 psi	>3000 psi	1000 psi
Impact resistance <sup>c</sup>	50 in/lbs	100 in/lbs	100 in/lbs	36 in/lbs
Cure to service	3 days	7 days	7 days	3-4 days
VOC	9 g/l	222 g/l	230 g/l	<250 g/l
Volume solids	100%	74%	76%	74%

<sup>a</sup>ASTM D4060

<sup>b</sup>ASTM D4541

<sup>c</sup>ASTM 2794



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