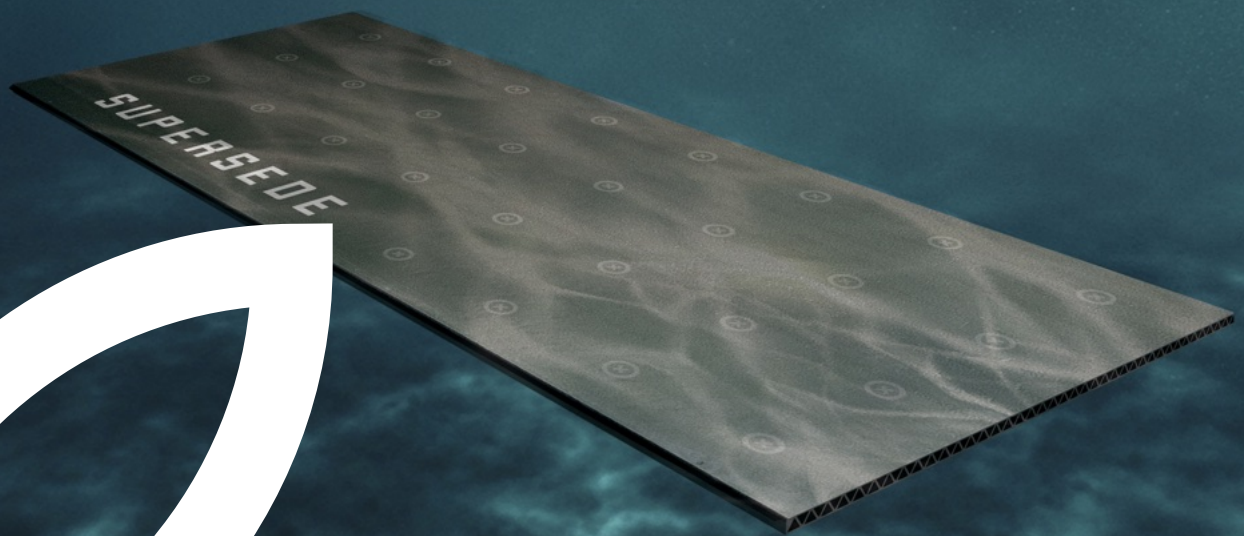




SUPERSEDE

2025 Boating Materials Report



Table of Contents

- 05 Introduction
- 06 Boating Plywood Status Quo
- 12 First Look: Consumer Plywood Problems
- 19 Future-Proofing Two Industries: Plywood & Boating



ÜSTA+

SHEATHING



0.75"



Introduction

What Boaters are telling us

Marine-grade plywood has been a staple in boat manufacturing and construction for decades. However, as concerns about durability, maintenance costs, and environmental impact grow, it is becoming increasingly clear that the industry must explore better alternatives. To understand the priorities and concerns of boat owners, a comprehensive, first-of-its-kind survey was conducted, gathering insights from more than 500 American boat owners. The results highlight a widespread lack of awareness regarding the materials used in boat manufacturing and a strong preference for non-toxic, durable, and sustainable alternatives..

Survey and Industry Research

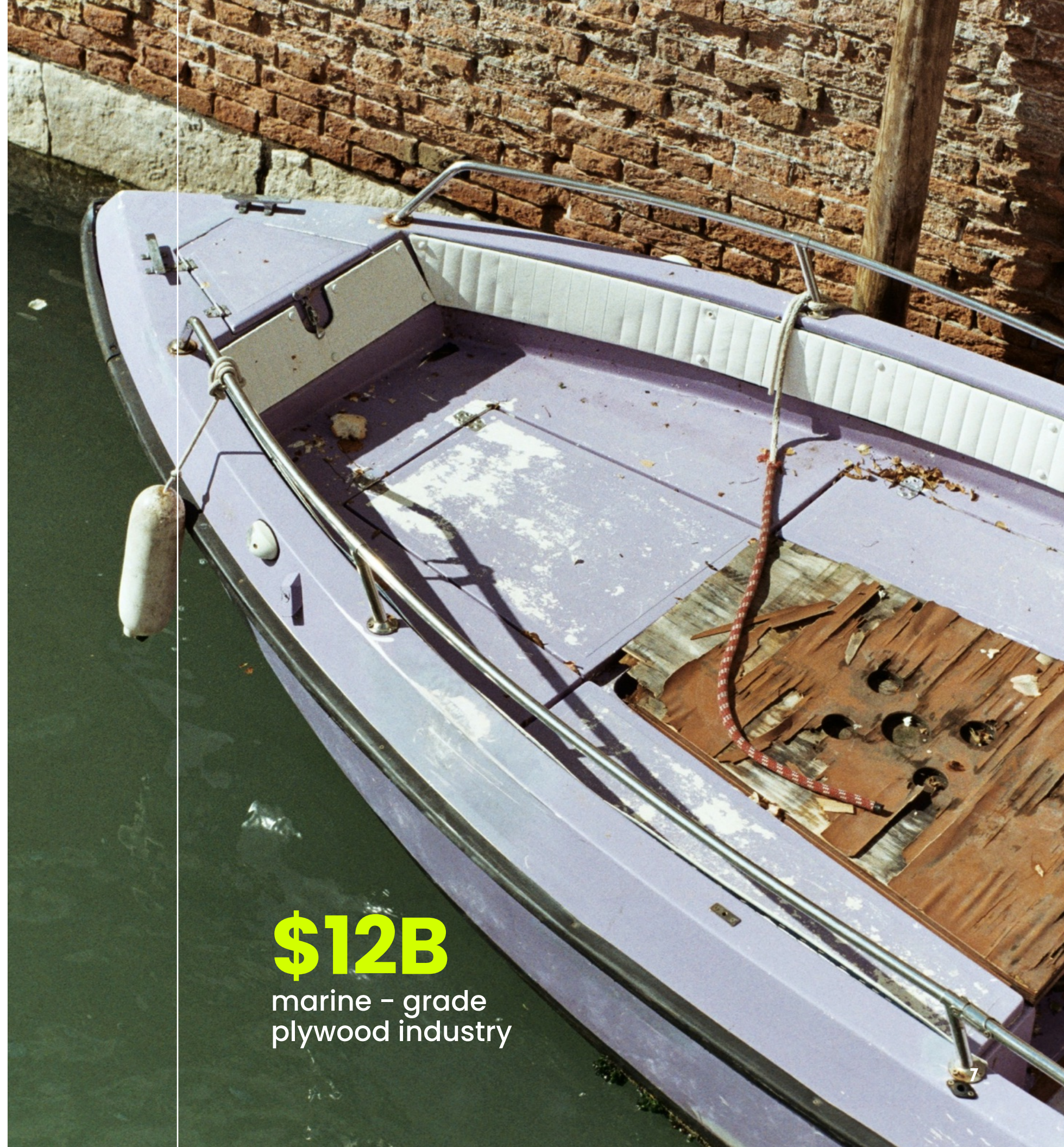
This survey provides a crucial snapshot of industry sentiment, revealing that a significant portion of boat owners are unaware that marine-grade plywood contains harmful chemicals, such as CCAs and formaldehyde. At the same time, many respondents expressed frustration over material-related issues like mold, rot, and structural failure, which are common problems that contribute to high maintenance costs and reduced vessel longevity. These findings underscore the need for innovation in marine construction materials.

By analyzing the data presented in this report, which ranges from original survey insights and industry research to new approaches, industry leaders can make informed decisions about the future of marine manufacturing.

Boating's plywood status quo

Boat owners have long relied on marine-grade plywood, making it a \$12 billion – segment of the larger \$50 billion plywood industry as of 2024 and one that will experience healthy growth, which will reach a projected \$74.5 billion by 2033. Yet, while those macro numbers might tell the story of a seemingly healthy industry, there are problems just beneath the surface, causing a rot that threatens the integrity of those boats sold, consumer satisfaction, the environment, and even much of the industry itself if it fails to adapt.

\$12B
marine – grade
plywood industry



Climate change is laying waste to boats as never before.

More natural disasters = higher insurance rates

Climate change is without a doubt the elephant in the room when it comes to the issues facing the boating world's plywood status quo. While its full impact remains unseen due to the lack of statistics for the boating industry, boating insurance premiums, particularly their rises, are often correlated with home insurance rises and the rise in catastrophic weather events.

The insurance stats are harrowing and clear: According to Munich Re 2024's insured losses in North America hit \$110 billion, with Hurricanes Helene and Milton accounting for \$27 billion in Florida alone. Florida, hit by those two hurricanes, also happens to be the largest boating market in the US and has seen astronomical jumps in insurance premiums to the tune of 42%. Mariners General Insurance Group is among many boating insurers to recognize the growing impact of climate change and suggests assessing risk and upgrading the boat as ways to mitigate climate change's impacts.

Plywood is a great place to start, as it requires treatment to be water resistant and is not a waterproof material. This inadequacy means more maintenance, and a significant risk for a myriad of issues ranging from warping of wood and rot, to leakage and mold. Further, the quality of the plywood, including its structural attributes, varies widely based on the supplier, with many not meeting the often assumed attributes expected of the material.

SUPERSEDE

repurposes

12,000,000

lbs of plastic annually*

saves over

160,000

trees annually*

with a

40%

reduction in carbon footprint*

(compared to traditional materials)

Plywood is an environmental and health disaster.

Deforestation continues at a rapid pace.

According to UN estimates, between 1990 and 2020 the world lost 420 million hectares of land due to the rising demand for timber, and specifically products such as plywood. To put that in perspective, it's almost the same land area as the entire European Union, and if reforested, would be equivalent to offsetting all global fossil fuel emissions for 4-8 years at current rates. Making matters even worse, marine plywood is often made from tropical hardwoods like okoumé, teak, or mahogany, driving deforestation in particularly vulnerable regions like Gabon and Indonesia.

After it has served its purpose during its ever-decreasing lifespan, marine-grade plywood is nearly impossible to recycle and often left to rot. The urea-formaldehyde (UF) glue used in its construction, which escapes into the air during the boat's use (especially in poorly ventilated cabins) also leeches into the water, causing further harm to marine environments. Chronic exposure to formaldehyde increases cancer risks by around 10%-20%.

420M
hectares of land
lost between
1990 - 2020.

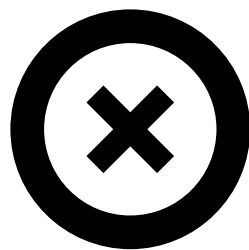
10-20%
increased risk of cancer
with chronic exposure to
formaldehyde found in
plywood.



Supply chain risks abound.

A 400% increase in lumber prices that occurred during the height of the COVID-19 pandemic isn't exactly commonplace, but uncertainty with trading partners may very well be. Since President Trump's tariff rhetoric has ramped up, 80% of dealers reported that their lumber suppliers have already raised prices, nearly one in five has increased their prices anticipating tariffs, and 45% expect more price raises ahead.

Lumber is a finite resource that, due to cost-effectiveness, abundance elsewhere, and conservation laws in the US, is sourced from many countries and is increasingly vulnerable. Even when it is readily available, both clear and unseen risks exist. For example, approximately 85% of America's soft lumber imports come from a single country—Canada—a glaringly obvious over-dependence. After Canada, Russia is the world's second largest softwood importer, and China is in the top five.



First Look

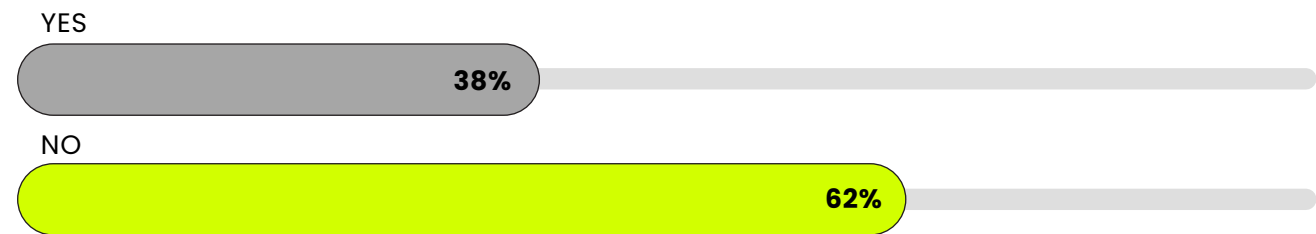
Consumer Plywood Problems

Boat owners, while being the target of massive corporations for a share of their spend and having plenty of industry outlets focused on them, rarely have a public opportunity to express themselves. While private focus groups are common, boaters' opinions on key matters in the industry are rarely aired publicly, fostering a potential disconnect between industry leaders and boat owners and presenting an opportunity for those looking to fill the gap.

Supersede's industry-first boating materials report features insights from more than 500 boat owners relating to a number of important issues, including the environment, cost, longevity, and more.

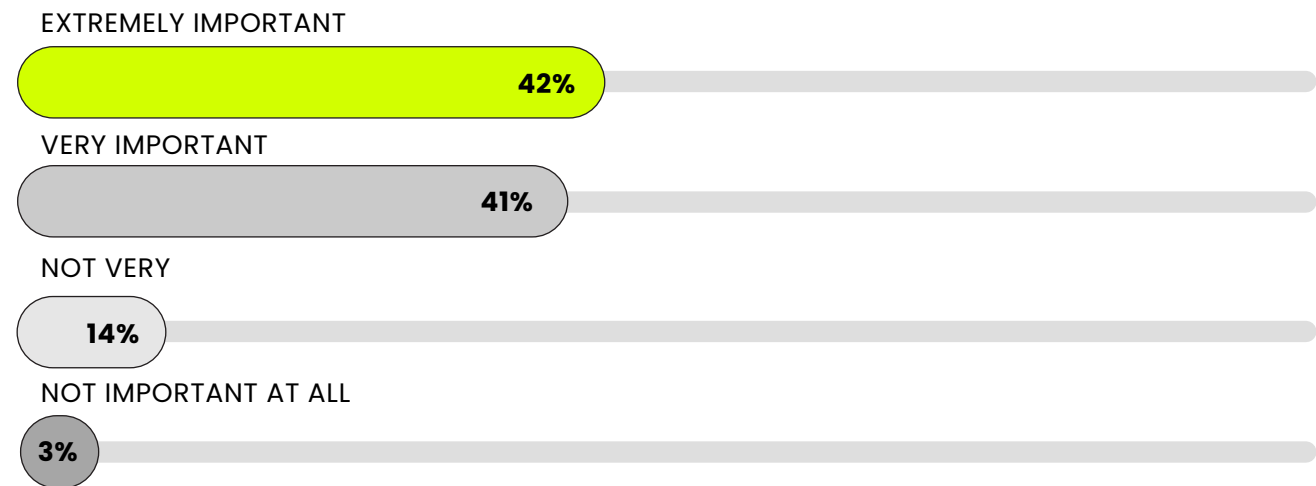
Are boat owners aware of the exposure to potentially harmful toxins present in marine-grade plywood?

According to the boat owners we surveyed, 62% were unaware that marine-grade plywood contains harmful toxins such as CCAs and formaldehyde. The lack of awareness from boat owners means that those who want to remain tied to the plywood status quo do not enact even basic countermeasures to reduce their risk. Broadening awareness would, at a minimum, lead to a focus on increased cabin ventilation and an increased presence of air filters. Crucially, it would make a conversation about alternative materials that do not possess the same health risks much more likely.



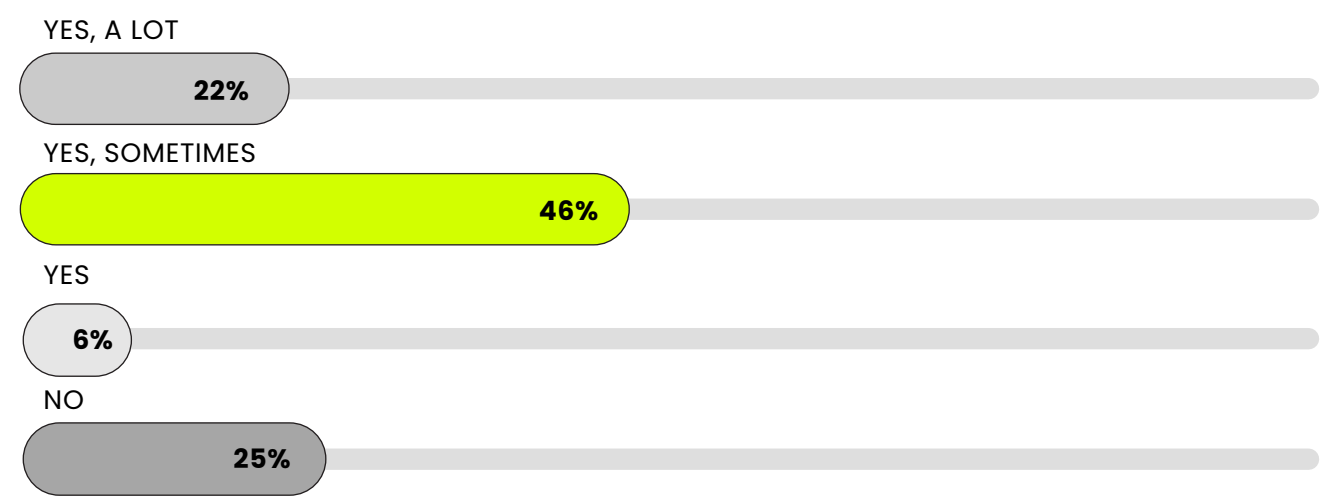
How important is it to ensure your boat does not contain any toxic chemicals?

Formaldehyde and CCAs can leach into water over time, potentially impacting aquatic life and contaminating the surrounding environment. As the awareness of these risks grows, boaters are seeking better alternatives. According to the survey, nearly 83% view it as important to ensure their boats do not contain toxic chemicals—with 42% of respondents saying it was “extremely important” and another nearly 41% considering it “very important.” This highlights a strong demand for safer, eco-friendly materials in the boating industry.



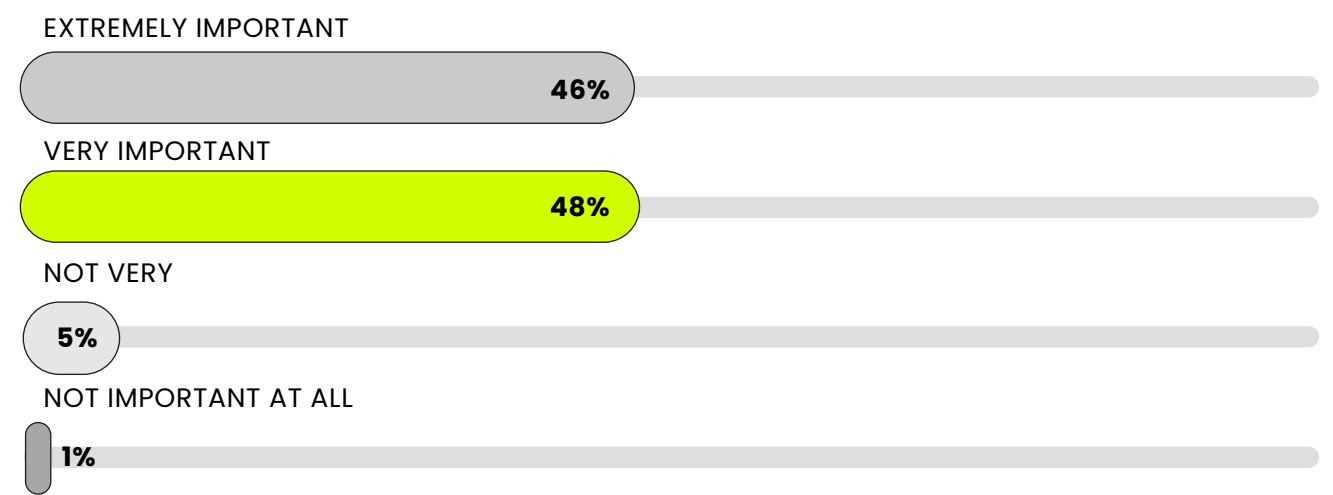
What about common issues such as mold, rot, soft floors, and delamination? Do you worry about those?

Beyond health and environmental risks, boat owners harbor significant concerns regarding material performance and longevity. When asked about common issues such as mold, rot, soft floors, and delamination, 22% of respondents said they worry about these issues “a lot,” while 75% worry about them at least sometimes. Only a quarter of respondents do not worry about material degradation, with a significant percentage of those respondents likely to be new boat owners who have not owned long enough to encounter problems.



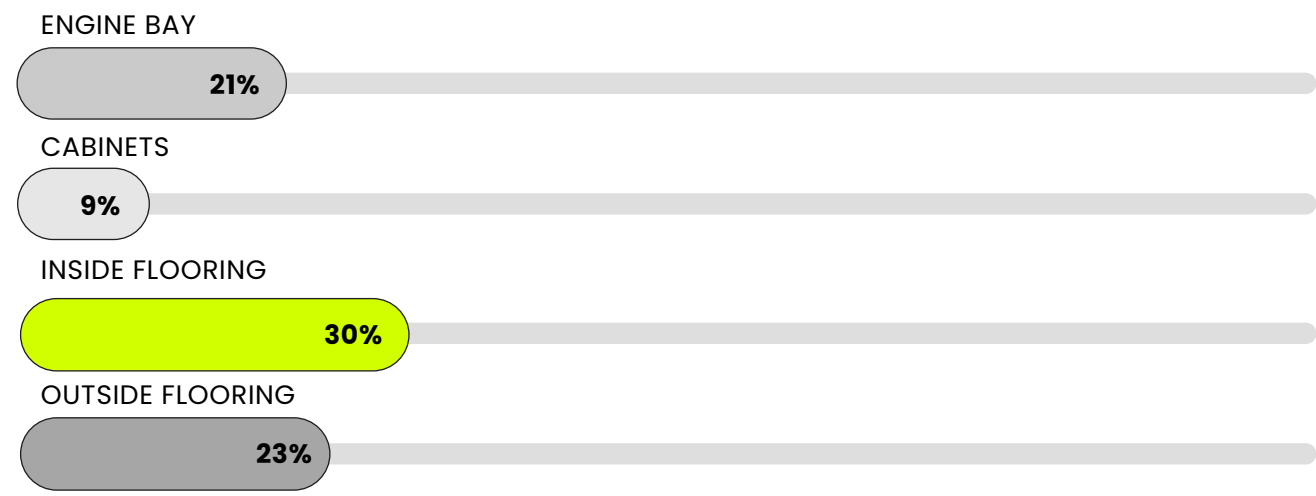
Does durability play a role in your boat buying decision?

Durability plays a crucial role and is perhaps the most important decision in boat owners’ purchasing decisions. A near-universal 94% labeled it as important, with nearly half of respondents – 46% – calling it “extremely important.”



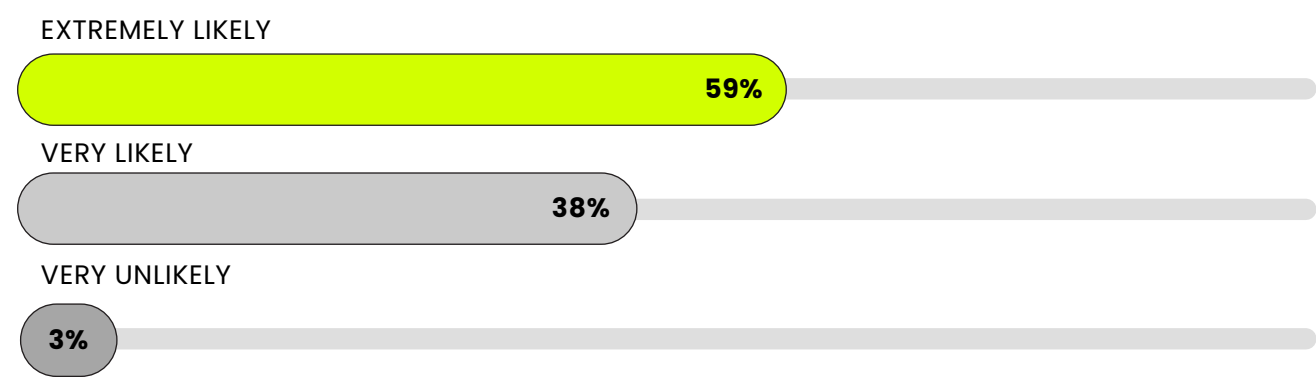
What sections of your boat are you most concerned about the plywood being a problem?

Flooring inside the cabin stood out as the number one issue of concern for boat owners, with 30% of respondents marking it as one of their specific problem areas. Coming in at number two was outdoor flooring, which 23% identified as a major concern. The third most significant issue to garner a high percentage of concern was the engine bay, which 21% cited. Only 9% identified cabinets as a problematic area. These findings emphasize that wood-related structural failures are a widespread issue in marine applications.



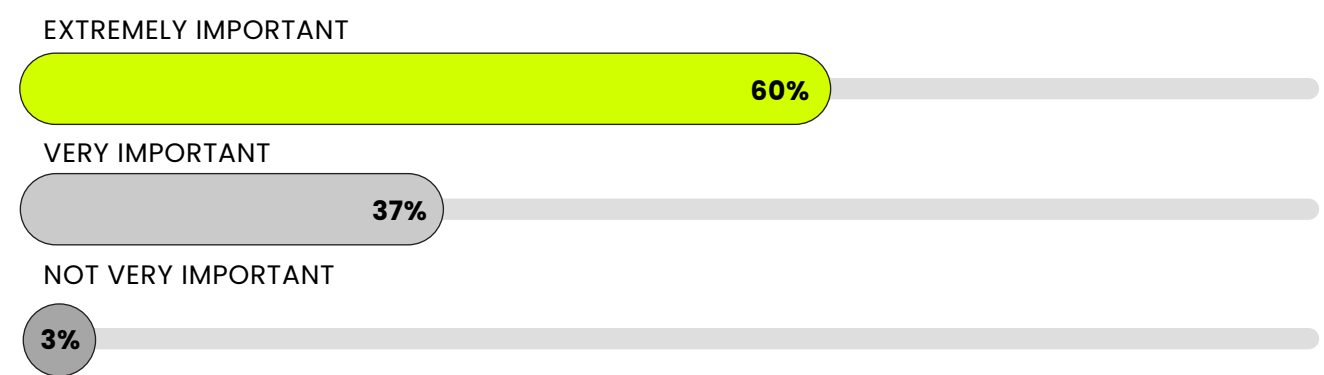
Would you purchase a boat with 100% waterproof and rot-proof materials at a similar price to traditional marine-grade plywood?

The aforementioned importance of durability shows that consumers will buy based on that attribute more than almost any other. The results demonstrated a clear openness to switching their purchasing decisions to the alternative. Just shy of 97% (!) of boat owners were either “extremely likely” or “very likely” to do so. This overwhelming preference demonstrates that boating materials are ripe for disruption as long as the alternative is proven to be more resilient.



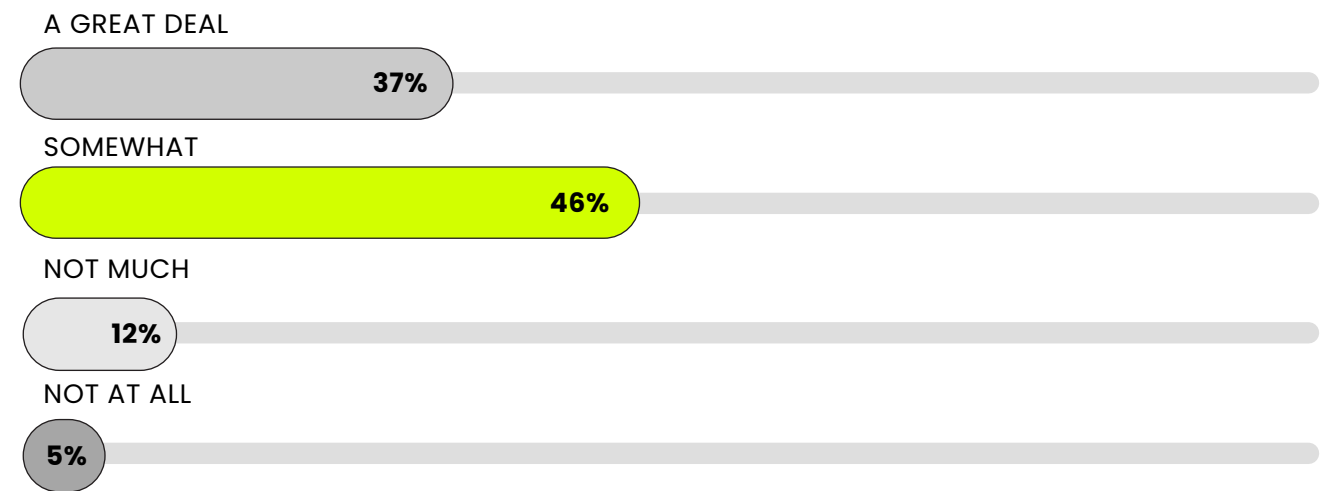
How important is reducing long-term maintenance and repair costs?

Boaters' preference for resilience is tied to long-term ownership and the time and cost of maintenance, which clearly registers as a major issue. An identical 97% of respondents stated that reducing long-term maintenance and repair costs is either "extremely important," or "very important" to them when purchasing a boat. Total cost of ownership [TCO] is extremely important and is a consideration over the long term, as boat owners are aware of the cost and time of ownership and see it as their defining purchasing issue.



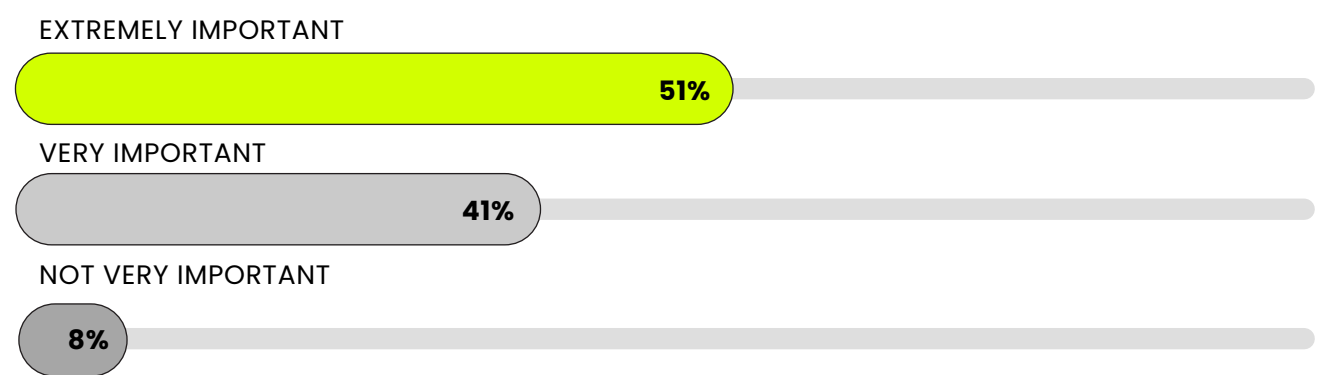
How much does the environmental impact of a boat manufacturer influence your buying decision?

Boaters' views of sustainability were perhaps the biggest surprise of our survey. While saving on cost and time are obvious key concerns, we didn't expect boat owners to be so heavily influenced by environmental considerations in their purchasing decisions. When asked how much the environmental impact of a boat manufacturer influences their trust in the brand, 83% said it affects their trust, while 37% of respondents said it affects them "a great deal." While the environment is clearly trumped by cost and durability considerations, boating brands, especially those in the premium segment of the market should consider environmental impact not just as doing good, but a key to doing well too.



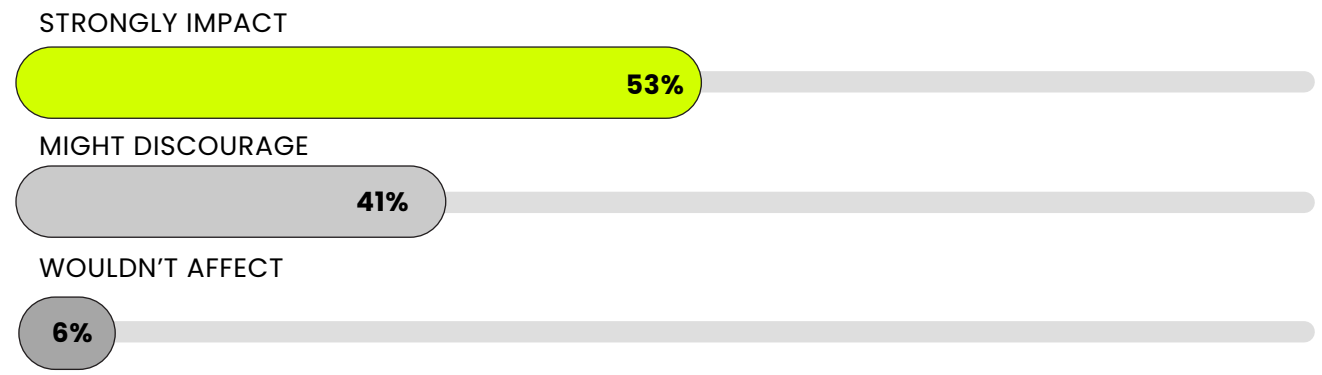
Is important that the boat manufacturers disclose the materials being used to build your boat?

This demonstrates that the majority of boaters are considering the ecological footprint of their purchases. Furthermore, when questioned about the importance of manufacturers disclosing detailed information about the materials used in their boats, 51% said it was "extremely important," and 41% found it "very important." Transparency in material composition is increasingly a key driver in purchasing decisions.



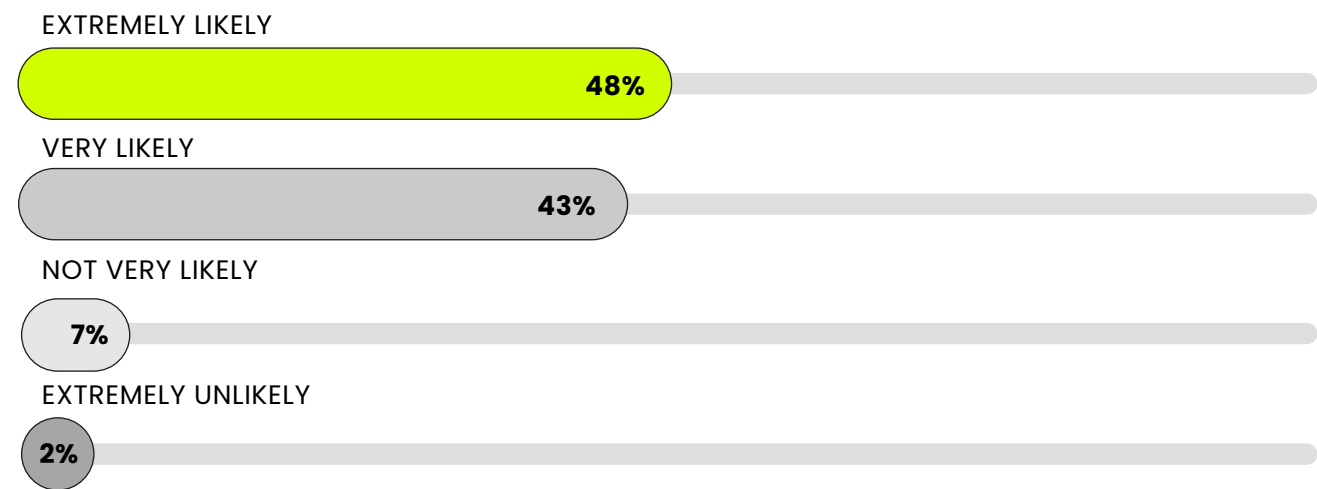
If you knew your boat was leaching chemicals into the water, would this impact your decision?

Environmental concerns extend beyond materials to the potential for chemical leaching into the water. When asked how this issue would impact their decision-making, 94% of respondents said knowing a boat's materials could negatively affect water quality would discourage them from purchasing. Over half - 53% - said it would "strongly discourage them." These findings highlight the need, and crucially, the market demand for a non-toxic alternative that does not contribute to water contamination.



Would you recommend a manufacturer that uses non-toxic, eco-friendly materials?

Finally, word-of-mouth recommendations play a major role in purchasing trends. When asked how likely they were to recommend a boat manufacturer that uses non-toxic, eco-friendly materials, 48% said they would be “extremely likely” to do so, while 43% said they would be “very likely.” With over 90% of respondents favoring sustainable alternatives, it is evident that the demand for innovation in marine materials is stronger than ever. Manufacturers that prioritize eco-friendly materials will not only build consumer trust but also strengthen their market position by aligning with industry trends.



Future-Proofing Two Industries

Plywood & Boating

Supersede Board presents a revolutionary shift by eliminating the flaws of traditional plywood while maintaining affordability and ease of adoption. By offering a durable, non-toxic, and eco-friendly alternative, Supersede is positioned to set a new standard for both the boating and construction industries. With growing consumer awareness and demand for sustainable solutions, Supersede is poised to lead the transition toward safer, longer-lasting building materials. The time for change is now, and Supersede is at the forefront of this movement.

1-888-CURBELL

www.curbellplastics.com

Curbell Plastics is a proud supplier of Supersede materials.