



NAWKAW IN SUSTAINABILITY

OUR CONTRIBUTIONS TO ENVIRONMENTAL PROTECTION

BY NAWKAW
04/2021

Architectural design's impact on its encompassing environment has been a long-standing debate, particularly after centuries of pernicious industrialization. The inconvenient truth remains that environmental destruction is part and parcel of construction, manufacturing, and architectural engineering.

In light of this, the onus falls upon all of us to ensure that impact is minimized and the environment which surrounds our creations remains intact and preserved for future generations. **This is the heart of sustainability**—the recognition that environmental impact is inevitable with the promise that said impact will be reduced as much as possible.

Nawkaw's promise of sustainability is hardcoded into its operations and products alike. Sustainability is one of our core values and has been since our values were first adopted. It is an inseparable part of our collective culture.

Our actions in sustainability must reflect the same boldness that our words evoke. Nawkaw holds culpability in the eyes of those who have yet to come, as every company does. Such a mandate demands a thorough understanding of sustainability and a tireless effort to ensure sustainability remains, always, at the heart of what we do.

Products that Last – Sustainability Through Longevity

Nawkaw's products are scientifically formulated and designed with specific projects in mind. Our application process is only handled by Nawkaw in large part to reduce waste and ensure its proper application on the substrate.

Constant refurbishment or replacement is costly fiscally as well as environmentally. Through long-lasting materials, in-house scientific advancement, photocatalytic solutions, and a focus on restorative product application, we ensure that our products cultivate sustainability through longevity.

Once in a Generation Solutions

The environmental cost of any coating application—through labor, travel, raw materials, surface preparation, and execution—is high enough. However, the environmental impact only exacerbates and multiplies with each passing re-application.

This is a critical issue when using paint as a coating for masonry or concrete. Coatings made of latex or similar materials may initially indicate cost savings, but over long period of time, peeling

and fading color solutions will need replacement. That involves another round of planning, preparation, travel, and further environmental costs.

Nawkaw instead offers a once-in-a-generation solution backed by a 25-year warranty. As Nawkaw's proprietary technology can permeate and form a chemical bond with the underlying substrate, there is no difference and no space between the finishing system and the surface it lies on. Nawkaw products do not chip, peel, or fade.

Financial benefits aside, there is simply a clear reduction of environmental impact through the creation of a long-lasting product. Particularly one that requires little-to-no upkeep or maintenance.

Mineral Stain Power

Our color solution is powered by the inherent advantages of mineral stain over latex paint and similar coating systems. Mineral stain's fundamental scientific properties are what enable Nawkaw to provide a wide range of colors and faux finishes that last decades.

Many building surfaces, such as concrete or masonry, are permeable by water. Latex paints placed onto the building surface may trap moisture within, which may cause the paint to peel or chip off over time. Trapped water may also pose long-term damage to the building surface as well.

Nawkaw products are permeable by design—allowing air and water to pass through the material without blocking or trapping substances like latex paint would. When measuring permeability, the true difference between a mechanical latex bond and a chemical, mineral bond becomes far more apparent.

The water vapor permeance of latex paint ranges from 0 to 20 perms when measured. Mineral stains such as those that power Nawkaw products, however, offer a permeance of 75 to 90 perms.

That is the power of mineral stain. Breathable surface coatings that remain durable for decades.

NawKote-PC

Nawkaw remains proud of its primary focus on color solutions for masonry and concrete, but our finishes can cultivate and promote sustainability without impacting the color of the substrate. Thanks to scientific advancements in photocatalytic technology, Nawkaw can extend the lifespan of existing substrates and reduce construction costs through the longevity of pre-existing structures.



Photocatalytic finishes can be used in conjunction with other sustainable solutions—such as hanging gardens, adaptive reuse, and recycled construction materials—to aid in developing zero-energy buildings and extending their lifespans through hydrophilic properties.

Photocatalytic technology and its use in surface coatings was first discovered in the 1960s through the work of Professor Akira Fujishima through doctoral research at the University of Tokyo. Through his work and the work of countless others, photocatalytic coatings have been able to transform what it means to maintain a structure.

Nawkaw's photocatalytic coating, NawKote-PC, is able to impart a wide variety of beneficial and protective properties to structures—particularly concrete surfaces—to aid in the structure's long-term viability.

NawKote-PC is a clear, water-based, non-toxic, and zero-VOC coating system that gives the treated surface properties to prevent carbonation, algae-buildup, protect concrete from hard UV-light, and provide self-cleaning attributes.

The benefits of a photocatalytic coating are wide-ranging and ensure sustainability through the reduction of maintenance, restoration, and replacement costs. For a fuller understanding of NawKote-PC and photocatalytic coating, our NawKote-PC Case Study explores this subject in greater detail.

Restoration and Preservation

From our initial operations in transforming masonry through long-lasting stain, a focus on the restoration and preservation of pre-existing structures has been seminal in our 30+ year history.

There is a self-evident sustainability inherent in our work in preservation and restoration. By modernizing the aesthetic appeal of masonry through staining, Nawkaw works to ensure buildings remain viable and appealing decades after their original construction—reducing the implicit demand for structural replacement.

In restoration, Nawkaw works to replicate the original structure, or its essence, through advanced color-matching technology and the work of expert-trained stain technicians. Decaying structures made from masonry, concrete, and related materials can be repaired through modern techniques before being stained to appear virtually identical to their original appearance.

In preservation, Nawkaw works in conjunction with building owners and managers to ensure original tones, hues, and textures found in the original construction are matched and replicated—leaving virtually no trace or incongruity between the modern finish application and the original materials.

Each restoration and preservation project requires different approaches, but their uniting element is their tireless effort to preserve history, architecture, and culture through sustainability. The maintenance of these projects contributes to their lifespan and thus disincentivizes environmentally-damaging demolition and replacement projects.

Considered Operations - Sustainability Through Service

In our collective effort to ensure our work impacts local communities as little as possible, our modus operandi remains steadfast in its focus on sustainable service.

Our operations are forward-focused, utilizing electric lifts over diesel machines whenever possible and reducing atomization through specialized techniques.

Nawkaw's services utilize small teams of highly-specialized stain technicians who are trained to prepare surfaces to ensure a long-lasting application, leave no trace of their presence at the job site, and properly recycle or dispose of materials.

Surface Preparations

Nawkaw does not sell its product without its service in large part due to the need to ensure its proprietary finishing system is applied in a sustainable manner—reducing the overall maintenance required and providing building owners with a 25-year warranty in most cases.

Surface preparation is also completed by applying neutralizing agents to the surface of the building, which prepares the substrate for application. Any runoff containing chemicals from this application is re-directed to containment areas and later disposed of properly.

After dirt and debris is removed as well as any pre-existing coating, the building surface is ready to be colored.

Leaving No Trace

Nawkaw's operations often take place as the final or near-final step in the creation of new structures. In acknowledgment of the surrounding environment—which is often highly trafficked before Nawkaw's arrival—Nawkaw ensures each stain technician leaves no trace as they perform their work.

Nawkaw products are custom designed for each project, so when the finishing system is applied as specified, there is little to no excess product going to waste. From risers and ladders to rags, rollers, spray guns, and much more, Nawkaw brings the tools necessary to get the job done and leaves no trace of their presence—with the exception of long-lasting stain.

Certifications – Sustainability Through Support

Industry leadership cannot simply start and stop with operations. Through innovative products and considered operations, Nawkaw is able to ensure sustainable business practices within its structure. However, it is through accreditation, continuing education with partners and peers, and investments in our operations that Nawkaw is able to ensure sustainability through the support of our industry and community.

LEED Credits

Increased awareness of the environmental impact of building maintenance and construction has led to the creation of accreditation systems based upon sustainability and best practices in environmental protection.

Leadership in Energy and Environmental Design, or LEED, was initially developed by the U.S. Green Building Council and has since become a global standard with tens of thousands of projects receiving accreditation across various LEED levels.

Nawkaw's sustainable approach, long-lasting products, and focus on scientific and non-toxic materials means that Nawkaw projects can help project managers and building owners receive points towards LEED certification.



Nawkaw's Lunch & Learn sessions provide architects and building designers with continuing education credits and a greater understanding of the long-lasting color options, incredible design versatility, and environmentally protective solutions provided by concrete & masonry stains.

Lunch & Learn

Continued education is a seminal aspect of sustainability as technology advances and new methods of green building development are discovered. There also remains a need to ensure architects and designers know which products are sustainable in nature and can specify those products in their creations.

As in other industries, these continuing education courses are often taught in lunch and learn-style settings. Nawkaw is proud to offer multiple courses certified by the American Institute of Architects and has been certified as a Continuing Education Provider since 1993.

Through these Lunch & Learn sessions, Nawkaw is able to help architects and others achieve their artistic visions while ensuring their work leads the way in sustainable building design.

Education and Investments

Nawkaw actively invests its time and resources into the further development of our existing product line and new

technologies that can ensure sustainability for our clients and us as a company.

Nawkaw's original product, NawTone, was our only offering in our first year of operations. Today, Nawkaw has expanded into a full line of colored and colorless products designed to bring color to surfaces, create metallic or glossy finishes, utilize different pigment types, and protect surfaces with photocatalytic finishing systems.

Our products are created in-house and are customized to specific needs and specifications. This enables us to only create product when needed on a case-by-case basis—so each client can be sure the color they agree to is the color they see on their project.

Nawkaw is actively researching and developing new technologies to continue to reduce environmental harm and produce sustainable solutions for the betterment of all.

Conclusions

Nawkaw's fundamental approach to sustainability ensures environmental stewardship remains at the heart of who we are as a company. Our inseparable relationship with our environment has led us to an intractable commitment to ourselves and to those we work with.

Whether our approach promotes proper stewardship of our environment through longevity, service, or support, we take pride and comfort in knowing that we are doing all that we can to serve our core values, our mission, and our planet. To that end, we can look to future judgment with the knowledge that we did what we needed to do in our time.

Nawkaw®

ARCHITECTURAL FINISHES INSPIRED BY ART & SCIENCE

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