

PRIVATE UNIVERSITY PRODUCTS AND NEWS

JANUARY 2022 PUPNMAG.COM

BUYER'S GUIDE 2022

OPTIMIZING ENERGY EFFICIENCY AND INDOOR AIR QUALITY

HIGHER EDUCATION AND INNOVATIVE TECHNOLOGY

DO YOU NEED A CONSULTANT FOR CLEANING SUPPLIES?

of Chicago Vedicine

TEACHING, RESEARCH, & CLINICAL PRACTICE IN PATHOLOGY



performance and longevity. Learn more about PVI's Dynamic Water Heaters at pvi.com.





OptiSize® will help you select an optimally-sized water heater for your next project





800.784.8326 | pvi.com

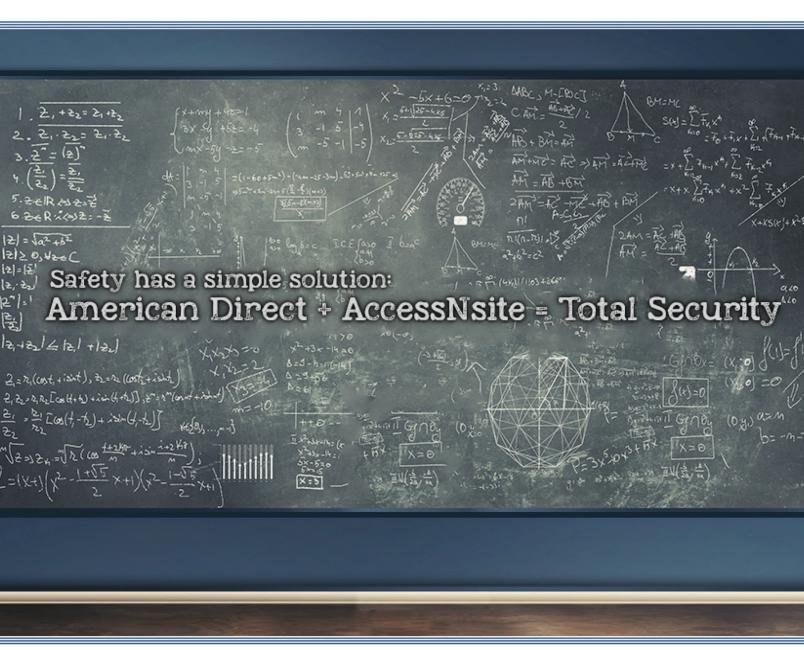
one place. every space.



Everything education needs — and more

More design in a stacker. More comfort in a sit. More models to match the needs of any (and every) space for learning. The robust build of Orbix® features an ultra-supportive, extra-wide backrest for unmatched breathability and the comfort to breeze through a day on campus. See more of this smart, new collection today.





American Direct is the only security company that offers a full featured and evolving access control platform alongside complete commercial integration. We can fill the needs of medium, large and enterprise scale campus and education construction and renovation projects.

Find out how American Direct and AccessNsite have worked with higher education locations across the US to make their buildings and housing safer and more convenient.



AccessNsite®

FEATURES

20

Air Filtration: Optimizing Energy Efficiency and Indoor Air Quality

The current COVID-19 pandemic has highlighted the need for indoor air quality. With respect to HVAC systems, experts have stressed increasing outdoor ventilation air, using hospital-quality air filtration, and employing portable air cleaners and germicidal UVC lights. Maintaining Indoor Air Quality (IAQ) is a complex and long-standing challenge that can have roots in many other problems.



Bringing the Future to Higher Education with Innovative Technology

Ernest Cline's *Ready Player One* (also adapted into a 2018 film by Steven Spielberg) is set in the year 2045, and it joins a long list of stories that depict a future overrun by ecological disaster and economic disparity. Cline's creative strength, however, is not his social commentary. Rather, what sets *Ready Player One* apart is how Cline uses familiar tropes of dystopian fiction to tell a wildly engaging adventure story, one that takes place in a virtual utopia called the OASIS. This endlessly open virtual "reality" serves as refuge for its millions of players, providing escapist fun as distraction from the inequities of the real world.





40

Buyer's Guide 2022

COLUMNS



Cover and above photo courtesy of the University of Chicago

SPOTLIGHT / ON OUR COVER



A FULL LOAD: TEACHING, RESEARCH, AND CLINICAL PRACTICE IN PATHOLOGY AT UCHICAGO

Aliya Husain, Professor of Pathology and Director of the Thoracic Pathology Fellowship at University of Chicago Medicine, melds her exemplary work in teaching, mentorship, research, and clinical practice to advance the field of pathology on each of these fronts.



MAINTENANCE & TECHNOLOGY

16

DO YOU NEED A CONSULTANT WHEN PURCHASING CLEANING SUPPLIES?

CAMPUS UPDATES

64

DHOR'S LEH



Yes, we made it through all the challenges that 2021 brought. This year has been unique, bringing some changes we could not have imagined when it began. Throughout the year, though, the value of private colleges shone bright. Your facilities reflect the value you place on enriching the complete person.

This issue of PUPN is unique in that we highlight elite companies which deliver products and services to help you achieve your goals of providing second-to-none facilities and amenities for your student body, faculty, and staff. These companies reflect your goals and philosophies of providing top-notch products and services, and they are familiar with the private college uniqueness that sets you apart from all other segments of education. Because we know that maintenance of your facilities and keeping current with innovative technologies are always on the forefront of your "to-do" lists, we also cover these vital, perennial topics in this issue.

Outside of the focus of this issue, I would like to wish every one of you a Happy New Year! The wonderful thing about this time of year is that we get to start afresh. We can re-set our courses to achieve the goals we want to accomplish, and those new opportunities are true gifts. I look forward with excitement to the new things that 2022 will bring to all of us. Wonders we could have never thought of await us, and I am eager for each one.

As you read this, your students are likely coming back to campus, and you are starting a new journey once again. You are considering projects that you will begin and complete over the year as you continue to improve your campuses in ways both big and small. That continual process of improvement is another thing that brings me wonder—you all somehow find ways to make perfect even better.

Thank you for allowing us to help bring you trusted sources of information to help you with your mission.

May the joys of the holiday season be with you all year long—

Ed Bauer

Publisher/Editor-in-Chief Private University Products and News Magazine ed@pupnmag.com



Ed Bauer Publisher/Editor-in-Chief ed@pupnmag.com

Lawrence Provenzano Associate Publisher

> Hilary Moreno Creative Director

Lisa Gibbs, EdD Cynthia Mwenja, PhD Staff Writers

Robert F. Goodfellow David Vinson, PhD Michael Wilson Contributing Writers

Cassidy Clevenger Circulation circulation@pupnmag.com



PUBLISHED BY FLAHERTY MEDIA PO Box 1903, Pelham, AL 35124 Toll Free: 800-705-5280 Fax: 855-239-8093

No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopy, recording, or any information storage-and-retrieval system without permission in writing from the publisher. The views expressed by those not on the staff of PUPN magazine, or who are not specifically employed by Flaherty Media, LLC, are purely their own. be sent to ed@pupnmag.com.



Today's LEDs may last up to 50,000 hours, but then again, Kalwall will be harvesting sunlight into museum-quality daylighting™ without using any energy for a lot longer than that. The fact that it also boosts student productivity, while improving learning outcomes and reducing absenteeism, is just extra credit.



A Full Load: Teaching, Research, and Clinical Practice in Pathology at UChicago

by Cynthia Mwenja, PhD

Aliya Husain, Professor of Pathology and Director of the Thoracic Pathology Fellowship at University of Chicago Medicine, melds her exemplary work in teaching, mentorship, research, and clinical practice to advance the field of pathology on each of these fronts. She has published a wide variety of research on heart and lung pathologies; according to her website, she is a "surgical pathologist with subspecialty boards in pediatric pathology. Her diagnostic expertise includes thoracic pathology with focus on heart and lung transplantation (in both adults and children), interstitial lung disease, and malignant mesothelioma."

After earning her medical degree from King Edward Medical College in Lahore, Pakistan, Husain completed residencies at the Loyola University Medical Center in Illinois and the University of South Florida. She subsequently finished a fellowship in surgical pathology at Loyola and an internal medicine internship at Mayo Hospital in Lahore, Pakistan before beginning her work at UChicago.

Since its establishment in 1927, UChicago Medicine has grown to become a system of multiple schools, hospitals, outpatient facilities, and community clinics. Husain embodies the ideals of UChicago's Department of Pathology, as presented on their website: "physicians and scientists work in close collaboration, merging the latest scientific findings with specialized diagnostic services in order to empower healthcare providers to better care for patients. Simultaneously, our training programs and educational resources prepare the next generation of world-renowned pathologists."

Teaching and Mentorship

As a Professor of Pathology, Husain's teaching responsibilities include instructing second year

medical students regarding clinical pathophysiology and therapeutics; this class, called ClinicoPathoPhysiology and Therapeutics (CPP&T), combines instruction in features of pathologies and their clinical presentations. According to Husain, in this four-month intensive course, students learn about "disease processes of common diseases." Once students finish the course, they take their medical exams and begin clinical rotations. UChicago Medicine's entire student cohort—around ninety to ninety-five students in each year of the medical program—all take this class; Husain has been running the pathology portion of the course for twenty years, teaching students how to examine patients in clinic during this last big course of their academic instruction at UChicago Medicine.

For the past sixteen years, Husain has also directed the Thoracic Pathology Fellow each year. After four years of pathology training, the student who is chosen to be the Fellow comes for a one-year sub-specialty training in thoracic pathology under Husain's guidance. The job description for the position indicates the scope of the position: "The fellow provides initial assessment of urgent biopsies, reviews

all material with faculty and clinicians and presents at the weekly interdisciplinary chest oncology conference. The fellow also participates in other conferences as scheduled and in teaching residents and medical students. The fellow will be responsible for two or more collaborative translational research projects that are expected to be presented at national meetings." Previous Fellows now work in a wide range of positions, many of them in academic settings similar to Husain's.

Brittany Cody, MD, the current Thoracic Surgical Pathology Fellow at University of Chicago Medicine, says that "it is an honor to train" with Husain. Not only is Husain a peerless mentor, Cody says, but she is also "a fantastic human being, a kind and caring person who has a nurturing personality." As the Fellow, Cody develops the workup of information for each patient, then she and Husain discuss the plan that Cody drafts. Cody appreciates the time Husain takes to sit down at the microscope together, giving time for Cody to ask questions. Cody says that Husain often adds information—"pearls of wisdom that people can't find in a book"—to enrich Cody's understanding of each situation. The



fellowship experience, Cody says, prepares students to work in a variety of settings that combine academics and clinical practice; in her career, she is considering focusing on lung diseases that are not tumors, such as emphysema or interstitial lung disease.

One of Husain's previous Fellows, Kamran M. Mirza, M.D., Ph.D., Associate Professor of Pathology, Medical Education, and Applied Health Sciences at Loyola University Chicago Stritch School of Medicine and Parkinson School of Health Sciences and Public Health, says that Husain has been an "incomparable mentor and teacher who has been instrumental" in his career path. He admires the ways that she continues to stay current with information in their shared field. She is "so knowledgeable and such an expert—yet so humble; she continues to learn." He hopes

to emulate Husain's example of "rising to the challenge and reinventing yourself" as Husain has done in her work at UChicago. Not only is Mirza is inspired by her example of becoming an international expert in malignant mesothelioma, he also says that "working with her is a delight." He aims to have the same sense of sincerity that she exhibits, and he uses the lessons he learned from her in his current daily work. Additionally, Mirza appreciates the fact that Husain had responded to him when he contacted her during his graduate studies. "Despite being famous," he says, "she lovingly took me under her wing."

Clinical Work

In her clinical work, Husain focuses on heart and lung pathologies, along with identifying pathologies in pediatric As a Fellow, Cody develops the workup of information for each patient, then she and Husain discuss the plan that Cody drafts. Cody appreciates the time Husain takes to sit down at the microscope together, giving time for Cody to ask questions. Cody says that Husain often adds information—"pearls of wisdom that people can't find in a book"—to enrich Cody's understanding of each situation.

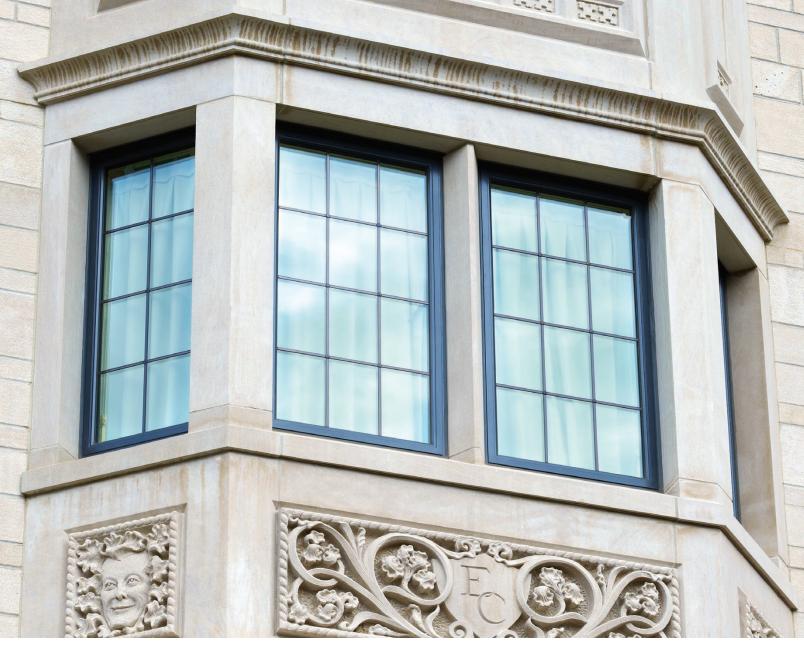
pupnmag.com JANUARY 2022 9



patients. In her previous work at Loyola Chicago, Husain developed a specialty in pediatric pathology. Board exams in this area were established in 1991, and Husain passed them in 1992. Husain is also board certified in anatomic and clinical pathology. As a pathologist, Husain makes diagnoses after examining the patients and seeing their biopsies. Husain's clinical duties also include looking at biopsies for heart and lung transplants.

Because UChicago medicine is a referral hub for malignant mesothelioma, an aggressive cancer that often affects the lungs and is commonly caused by exposure to asbestos, Husain has become an expert in the pathology of this condition. She works with oncologists and surgeons to make diagnoses and recommendations for individual patients in her clinical practice. Husain says that all cancers are now treated by teams of experts, including





HOPES®

For more than a century, Hope's has handcrafted the world's finest steel and bronze windows and doors, and we continue to refine the art that makes them the strongest, most sought-after and longest lasting windows and doors available. Hope's exclusive hot-rolled steel and solid bronze profiles replicate the traditional aesthetic of historic buildings while providing modern performance and efficiency. Hope's windows and doors are built to last a lifetime and beyond – sustaining their beauty and performance for generations. HopesWindows.com

HOPE'S WINDOWS, INC. - EST. 1912 - JAMESTOWN, NEW YORK





See our full line of emergency lighting solutions, including our IIS Series Central Inverter Systems, at www.iotaengineering.com.









1-800-866-4682 www.iotaengineering.com

oncologists, surgeons, radiation therapists, nurses, social workers, and—of course pathologists. These teams—referred to as "tumor boards"—meet weekly for each case. Husain reports that she knew little about this condition before beginning work at UChicago, but she developed expertise in the field to better serve the needs of the patients referred to the medical center.

According to the American Cancer Society, the rates of malignant mesothelioma in the United States remain fairly stable, though the diagnosis is still increasing in other parts of the world, probably because asbestos is still widely used in India and in many African countries. The American Cancer website states that this type of cancer can take twenty to fifty years to develop, and the risk of developing this cancer does not decrease after exposure to asbestos stops. While the median survival rate currently remains less than two years, Husain says, the doctors at UChicago are now better able to treat their patients overall than they could previously, and outcomes are better; with each passing decade, cure rates have increased.

Research

The continued challenges of treating malignant mesothelioma spur a great deal of Husain's research agenda, in which she is looking at molecular genetic changes to identify potential targets for newer therapies. Husain is the lead researcher for a paper which provides guidelines for making a diagnosis of malignant mesothelioma; she and the other researchers who contribute to the paper update the guidance every three or four years. Since there are only around three thousand cases of malignant mesothelioma each year in the United States, many physicians have not encountered the disease before. Prior to beginning work in her current position, Husain says, she was one of those physicians who had not seen a case, but she gained expertise through her work at UChicago. Cody says that UChicago doctors run many clinical trials related to the mesothelioma program.



- · Identify visitors with clear audio/video
- · Buzz in approved guests from inside
- Answer guests remotely with a mobile app

Featuring Aiphone's IXG Series for campus communication and student housing security.

Learn more at aiphone.com/PUPN

According to her website, Husain is "currently studying genetic mutations in lung cancer, and antibody-mediated rejection in heart and lung transplant." Husain says that, overall, lung cancer rates in the United States are going down. Campaigns against smoking have been effective, and smoking is a major risk factor for lung cancers.

According to her website, Husain is "currently studying genetic mutations in lung cancer, and antibody-mediated rejection in heart and lung transplant." Husain says that, overall, lung cancer rates in the United States are going down. Campaigns against smoking have been effective, and smoking is a major risk factor for lung cancers. Cancer researchers refer to the Surveillance, Epidemiology, and End Results (SEER) Program data compiled by the National Cancer Institute of the National Institutes of Health. This registry publishes data every year about cases, projections, and other cancer statistics. Despite the success of non-smoking campaigns in reducing lung cancers, however, heart disease is still the leading cause of death in the United States, since smoking is only one of several potential causes. Husain vigorously contributes to advancing

knowledge in the field; as the Elsevier author website states, "She is author of more than nine book chapters and more than fifty publications. She is also author of Thoracic Pathology, a volume in the High Yield Pathology series."

As busy as Husain is, Cody says, she is easygoing and flexible, with a commitment to "make it work," whatever the challenge in front of her. Mirza says that Husain "brings excellence and doesn't bring the ego." These qualities help Husain to sustain her high standard of work, despite the full load she carries in teaching, research, and clinical practice.

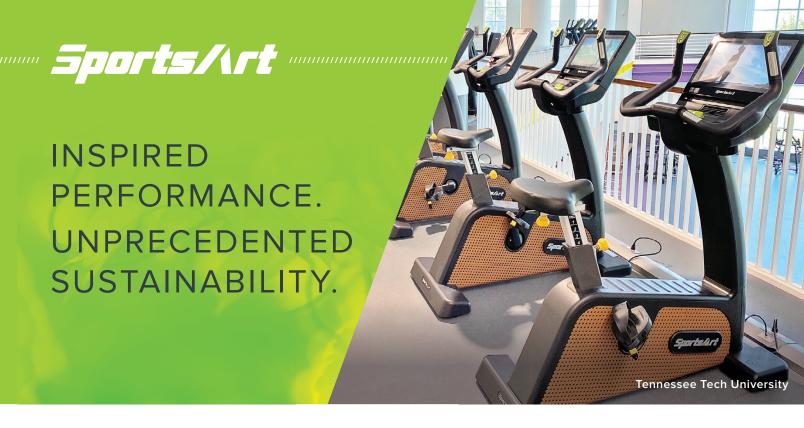


ABOUT THE AUTHOR:

Dr. Cynthia Mwenja teaches

Composition and Rhetoric at the University of Montevallo.





SERVE TODAY'S GREEN-MINDED STUDENTS.

Your campus recreation center can now align your campus' sustainability goals with student lifestyle and fitness expectations with SportsArt's sustainable fitness solutions. Our non-motorized cardio equipment allows you to optimize your space by not requiring an outlet. Our energy-efficient motorized treadmills use 32% less electricity than a treadmill with a standard motor. Or, help power the lights with the electricity you generate on our ECO-POWR™ units. Student-run environmental initiatives or "green grants" could even help offset the cost, making it easier and more affordable to bring innovative, reliable SportsArt equipment to your campus.

"We're having maybe 2400 kids a day through here...they just absolutely love the equipment we have put in this facility." – Suzann Hensley | Tennessee Tech Interim Director



Discover how SportsArt can work for your university at **gosportsart.com/university.**



MAINTENANCE AND TECHNOLOGY

by Michael Wilson

Do You Need a Consultant When **Purchasing Cleaning Supplies?**

Purchasing cleaning products to operate a private college or university is not the simple process it used to be. The situation is much more complicated today, mainly because purchasers can select from thousands of cleaning products at a variety of price points; some products are more environmentally conscious than others, and some are designed to improve worker productivity or offer superior performance benefits. Trade publications such as PUPN can help decision-makers at private colleges and universities know what products are available, which might best serve institutional needs, and introduce products that could best benefit each school. While PUPN and similar trade publications can play a vital role in helping steer readers through the cleaning supply maze and confusion, procurement difficulties can still arise.

For those whose role is to be in charge of building services and the purchasing of cleaning products, tools, and equipment, selecting a distributor to manage all this information well and provide customized solutions—while staying within budget and accomplishing campus goals as to cleaning and environmental concerns—can be a great help. Administrators of private colleges and universities want more than supplies from a janitorial distributor, including the following:

- To have help uncovering their cleaning needs
- To discuss cleaning challenges and needs with their distributor
- To have the distributor identify product options that can address those needs
- To have the distributor evaluate current products, suggesting those that have proven value and others that may need to be replaced
- To allow the distributor to help their customers narrow the alternatives and select the most cost effective cleaning product options
- To watch the working relationship to grow over time
- To benefit from distributor-provided training and after-sale support

Some astute janitorial distributors are taking note of what their customers want. Consequently, they are making change to their traditional marketing role with clients and becoming "consultants," advising their clients on cleaning solutions, products, and equipment and help their customers address all of these issues.

Consultative Selling

Consultative selling evolved after World War II and reached its zenith in the 1960s and 1970s. Then, for a variety of reasons, the concept faltered. However, it has seen a rebirth in the past ten to fifteen years. One of the key reasons for its rebirth was the fact that in the past twenty years or so, the number of distributors in the professional cleaning industry has dwindled dramatically. Some have gone out of business entirely, while others merged with other distributors or were purchased by other companies. Those distributors that remain and are meeting the needs of today's end-customer realized that a new marketing approach was necessary.

A working definition of consultative selling is "an exchange of information in which the salesperson uncovers and develops a true understanding of a facility's needs [as it pertains to cleaning and maintenance] and helps them select products and tools that will address those needs." The word "uncovers" is very important in this definition. In many ways, this work is the essence of consultative selling. Administrators benefit from what can be termed "hand holding" guidance to help uncover what their cleaning needs are, what their goals are when it comes to cleaning, and most specifically, what types of cleaning products are available that will better serve those needs.

In the 1960s and earlier, there were only a handful of chemical manufacturers in the janitorial industry that were marketing products in the U.S. Now there are scores from all over the world. For instance, the "Buyers Guide" on the ISSA (the worldwide cleaning association) website allows prospective buyers to search for manufacturers of floor finish. Now, there are around 170 manufacturers of floor finish, no longer five or six. Assuming that each company is making five different types of floor finish, consumers have more than 800 brands of floor finish to investigate to determine which are sustainable, which

A working definition of consultative selling is "an exchange of information in which the salesperson uncovers and develops a true understanding of a facility's needs [as it pertains to cleaning and maintenance] and helps them select products and tools that will address those needs." The word "uncovers" is very important in this definition.



pupnmag.com JANUARY 2022 17

Some janitorial distributors now have access to software databases, apps, and online dashboards that can help their clients evaluate many of these brands and select those that best meet specific needs and criteria. These technologies allow the distributor—with their customer at their side—to see and compare hundreds of products.

are not, which are most cost effective, which perform most effectively, and which will work best in the specific institutional setting. Such research can be a major hurdle to tackle.

Private college and university administrators typically do not have the time to analyze all of these products, so help in making buying decisions is often needed. Fortunately, some janitorial distributors now have access to software databases, apps, and online dashboards that can help their clients evaluate many of these brands and select those that best meet specific needs and criteria. These technologies allow the distributor—with their customer at their side—to see and compare hundreds of products. These technologies provide the added information necessary for school administrators to make thoughtful decisions when making product selections.

Health

Ultimately, the consultative selling approach can be very beneficial for private colleges and universities. One of the best things about this approach is that it can eliminate the purchase of cleaning products that either are not effective or do not protect the health of those who use a facility. While one of the goals of cleaning is to keep a facility looking its best, the key goal of cleaning is to make sure everyone using that facility stays healthy. When it comes to making these decisions, private college and university administrators are advised not to go it alone, but rather to leverage the knowledge base and technological tools available through a distributor; these resources can facilitate thoughtful cleaning product and equipment decisions.

2

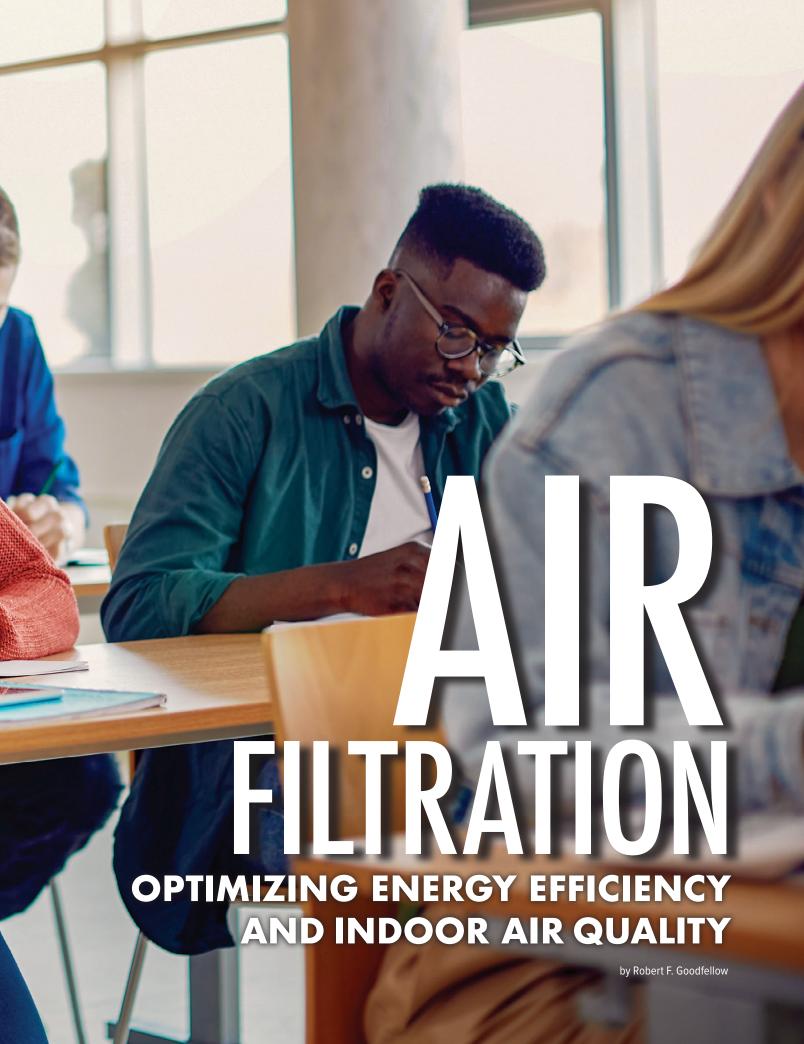
ABOUT THE AUTHOR: Michael Wilson is Vice President of Marketing for AFFLINK

(AFFLINK.com), developers of the ELEVATE process, an online system that allows users to learn about and select products that will help operate their facilities in a greener, more sustainable, healthier, and more cost-effective manner.





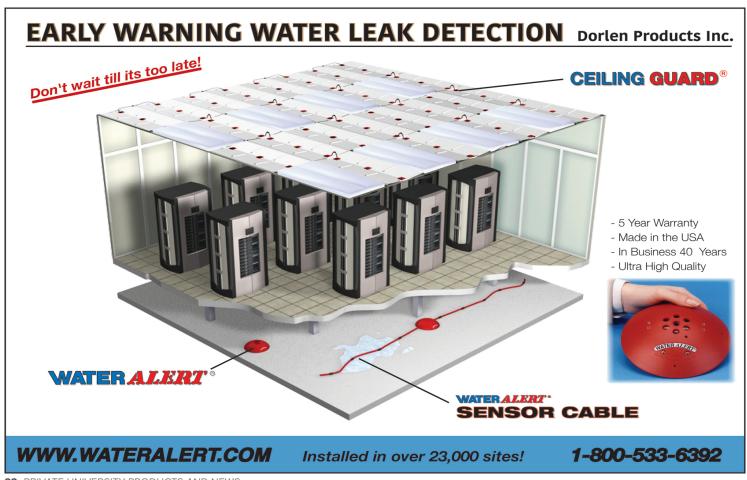






The current COVID-19 pandemic has highlighted the need for indoor air quality. With respect to HVAC systems, experts have stressed increasing outdoor ventilation air, using hospital-quality air filtration, and employing portable air cleaners and germicidal UVC lights. Maintaining Indoor Air Quality (IAQ) is a complex and long-standing challenge that can have roots in many other problems. The size, type, and age of the building, the climate, and the vast array of available mechanical systems are just part of the picture, and solving for good IAQ takes constant work; it's not a "one and done" situation.

As the pandemic stretches on, prudent planners will think about developing effective long term air quality strategies for their facilities. A sound IAQ strategy can not only help keep occupants safe, improve cognitive functions, and reduce absenteeism, but it can also provide a path toward sustainability, lower operating costs, and a more environmentally-friendly footprint. To make informed decisions about IAQ, planners must understand some of the basic tenants.



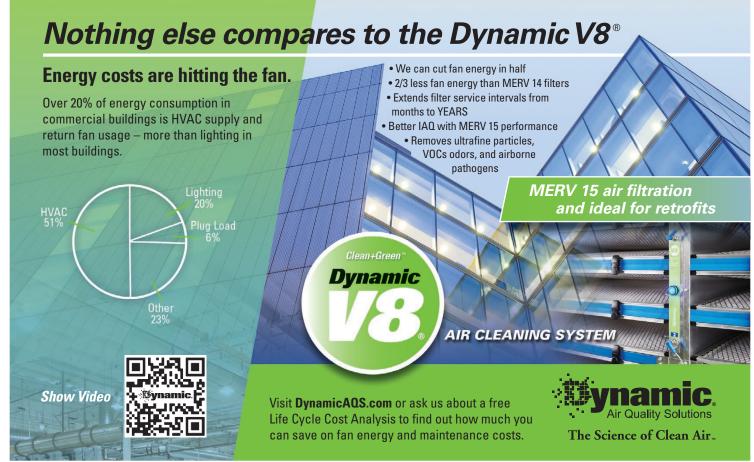
Common Indoor Air Quality Problems

Airborne contaminants indoors either originate within the building or are drawn in from the outdoors. If pollutant sources are not controlled, indoor air problems can develop, even if the HVAC system is properly designed, operated, and maintained. Sources of indoor air contamination include underground sources (e.g., radon, pesticides), along with a variety of indoor sources (e.g., equipment, furnishings, and cleaning supplies). Concentration levels of air pollutants can vary greatly by time and location within a building and even a single room. Pollutants can be emitted from point sources, such as kitchen facilities, or from area sources, such as newly painted surfaces. Pollutants can also vary with time, such as only when floor stripping is done.

IAQ problems that generally get the most attention are those that involve lots of complaints. Issues can be exacerbated by allergic reactions and health issues, which often involve outdoor contaminants that are being entrained into the building with outdoor ventilation air. One of the most common issues involves vehicle emissions. Vehicle exhaust can be problematic when buildings are located in urban areas or near heavily traveled roads.

Outside ventilation air is used to dilute airborne contaminants, but outdoor air can sometimes be more problematic than indoor air. With today's low-VOC emitting building materials, furniture, and cleaning chemicals, and with the absence of indoor smoking, airborne particle and odor contaminants are much more apt to enter a building through the fresh air intakes. To cope with these issues, designers have found that air cleaning systems can be incorporated into the HVAC systems to not only clean the incoming fresh air, but also to keep indoor air at contaminant levels below outdoor levels.

As the pandemic stretches on, prudent planners will think about developing effective long term air quality strategies for their facilities. A sound IAQ strategy can not only help keep occupants safe, improve cognitive functions, and reduce absenteeism, but it can also provide a path toward sustainability, lower operating costs, and a more environmentally-friendly footprint.



pupnmag.com JANUARY 2022 23

Addressing air filtration alone can reduce a building's total energy footprint by 5-10%. Historically, increasing filter efficiency has meant increasing energy and operating costs because it takes more fan horsepower to push air through denser, more efficient filter media.

Cost Savings

Even though good IAQ has real, tangible benefits, IAQ plans are still largely cost driven. So where are potential savings for facilities that implement these applications? Energy costs present the largest opportunity. HVAC accounts for about 40% of the energy used in U.S. commercial buildings, making HVAC fan energy a good target for cost reductions and savings on a facility's annual operating budget. In new buildings, according to the U.S. Department of Energy, adopting energy-efficient design and technologies—in HVAC and other areas—can cut energy costs by as much as 50%, and in existing buildings, renovations that replace older systems with more efficient technology can yield savings of up to 30%. With respect to only IAQ and the air filtration component of an HVAC system, significant operational savings can be found through:

- Reduced fan horsepower from lower static pressure
- Reduced ventilation air requirements
- Reduced maintenance and disposal costs from longer service intervals

Addressing air filtration alone can reduce a building's total energy footprint by 5-10%. Historically, increasing filter efficiency has meant increasing energy and operating costs because it takes more fan horsepower to push air through denser, more efficient filter media. The denser the filter media, the higher the static pressure resistance. With a lower static pressure, less fan energy is required to move air through the HVAC system. Lower static pressure corresponds directly to energy savings.

Polarized-media air cleaners offer relatively low resistance. In some cases, there can be mid-life pressure drop savings of up to one and half inches versus passive, mechanical filters. This difference allows fans to be designed and selected with lower horsepower requirements and potentially less operational energy consumption.

Maintenance costs present yet another area for savings and include labor, ordering, handling, storage, and filter disposal costs in addition to materials. High efficiency air cleaning systems such as the Dynamic V8 Air Cleaning System offer very high dust-holding capacities and can extend



cramer

Modern Lab Seating.

Because sophisticated spaces require sophisticated seating.









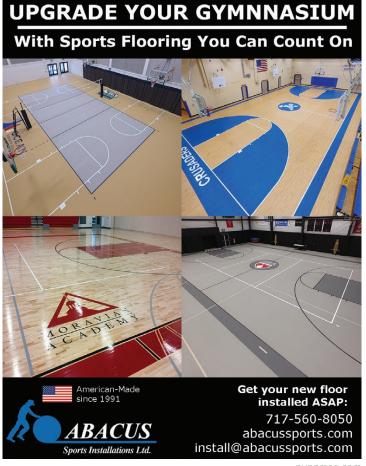


change-out intervals from every several months to every several years. Although cost controls may typically steer designers toward lower front-cost options, particularly in regards to air filtration, sustainability initiatives are highlighting a broader goal. Increasingly, sustainability initiatives have been trumping cost initiatives. In some cases, a high efficiency filtration system can pay for itself in fewer than two years, since fan horsepower and system static pressure greatly impact energy consumption; filter replacement costs and length of maintenance intervals influence ongoing operational costs, as well. These costs can be evaluated to determine the life cycle costs.

Good IAQ improves health, well-being, and performance. Planners should take this opportunity to develop an IAQ strategy that will enable them to improve campus IAQ while reducing energy consumption and lowering operating costs at the same time.

ABOUT THE AUTHOR: Robert F. Goodfellow, CAFS, is Vice President of Marketing with Dynamic Air Quality Solutions and an indoor air quality professional with over thirty years' experience in the HVACR industry. Dynamic Air Quality Solutions has been designing and manufacturing air cleaning systems for over 35 years and is known for high-efficiency particulate and gas phase air filtration with low pressure drop. Its products have been used in hundreds of high-impact applications. Contact him at rgoodfellow@ DynamicAQS.com or visit www.DynamicAQS.com to learn more.





DO YOU FLUSH AND DISINFECT YOUR CLEANING EQUIPMENT?

Challenge:

Recovery tanks that collect all of the dirt, debris and possible contaminates are lying stagnant most likely, producing foul odour and possibly growing bacteria, viruses, mould and mildew. This is a risk to the health and safety of custodians, employees and visitors of any facility.

Cleaning equipment comes in contact with many surfaces throughout your facility, if it is cleaned after each shift, there is little worry, if it is not clean, there is a major possibility of cross contamination and health and safety issues due to spread of diseases and outbreaks.

Solution to Lower the Risk of Infection:

What is the cleaning and disinfecting protocol of equipment? Now is the time to introduce the proper protocol.

Types of equipment to include are auto scrubbers, walk behinds and ride on's, wet vacuums, sweepers, carpet extractors and even pressure washers.

The focus should be the recovery or collection tanks, anywhere the dirty water and solutions are collected. The bins of sweepers, the wheels of vacuums, extractors and pressure washers, even wet mop buckets. As a side note, vacuum filter bags should be changed more frequently or even switched out to HEPA filtration which will reduce the amount of airborne particulates spread in the air.



ES364 Neutral Disinfectant

Recommended for cleaning & disinfecting cleaning equipment and tools

Fast contact-time disinfectant. Kills Norovirus in just 5 minutes. Provides superior cost-performance benefits, delivered by cost-effective quat concentrates. Contains a neutral pH that is non-staining, non-corrosive to equipment, easily handled and does not dull floor finishes.

DIN: 02470802, EPA: 6836-366-64900

WATCH OUR VIDEO ON WHY EQUIPMENT CLEANING IS ESSENTIAL



Email demo@charlotteproducts.com for more information



CHARL©TTE™ PRODUCTS LTD.







BRINGING THE FUTURE TO HIGHER EDUCATION WITH LINE OF THE FUTURE TO

by David Vinson, PhD

Ernest Cline's *Ready Player One* (also adapted into a 2018 film by Steven Spielberg) is set in the year 2045, and it joins a long list of stories that depict a future overrun by ecological disaster and economic disparity. Cline's creative strength, however, is not his social commentary. Rather, what sets *Ready Player One* apart is how Cline uses familiar tropes of dystopian fiction to tell a wildly engaging adventure story, one that takes place in a virtual utopia called the OASIS. This endlessly open virtual "reality" serves as refuge for its millions of players, providing escapist fun as distraction from the inequities of the real world.

Wade Watts—the story's teenage protagonist—has devoted his life to unlocking the puzzles hidden within the digital landscape of the OASIS, and at the heart of the story is Wade's race against other devoted players to unlock the most obscure and difficult puzzles. The first to locate three hidden keys will inherit the immense fortune of the deceased creator, in addition to control of the entire OASIS.

For students, higher education offers no grand prize akin to immediate fortune or global power—although great memories, new lifelong friends, and access to knowledge and training that prepares them for a competitive job market aren't too shabby, either. In fact, private universities and colleges around the country are even using innovative technologies one would recognize in Ready Player One. Virtual reality (VR), for instance, can now be used to transform how we think about teaching, learning, and interacting with one another on and off campus.

The Challenges and Rich Potential of Virtual Reality in the Classroom

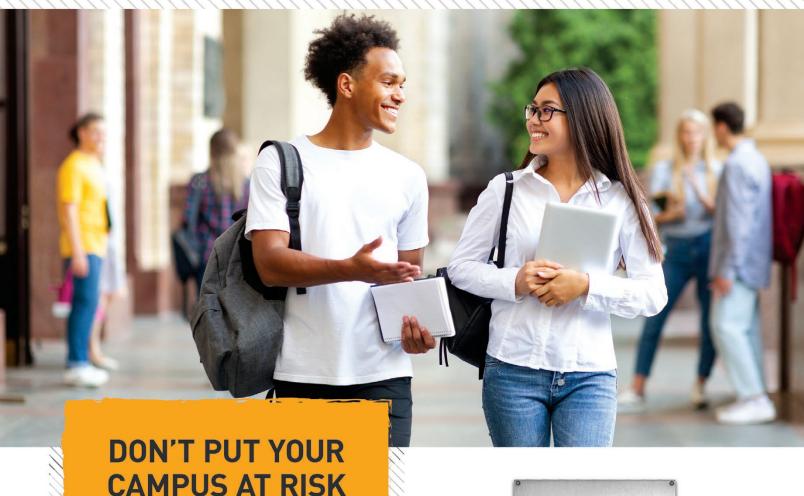
VR is a three-dimensional, multisensory, and interactive computer-mediated simulation. For the user, the experience is not unlike inhabiting and acting within an external environment. Of course, tapping into the potential of VR as an educational tool poses multiple challenges. For programmers and developers, the task of creating a virtual, usable world is daunting, and doing so demands considerable skill and dedication. For educators and students alike, the feasibility of using VR in the classroom remains somewhat of a mystery, a work-in-progress in terms of maximizing the technology's potential. Moreover, in a practical sense, not only would a classroom need access to VR technology, but the room itself would need space designated for "play zones" where the equipment could be used safely. Educators and students would need training for how to use the equipment, and educators would need to plan learning outcomes in conjunction with IT specialists, programmers, and developers to make new virtual experiences pedagogically productive.

Innovation is neither easy nor straightforward, but collaboration between educators and people in industry is entirely doable—and the more collaborative we are, the clearer the path will become for using VR technology to fulfill university course outcomes. The possibilities are exciting and endless from a pedagogical perspective, and the enthusiasm that courses designed with VR technology in mind would generate among the student body is easily imagined. One can also imagine the efficacy of classroom-based VR as a recruitment tool for potential students, the majority of whom are already accustomed to using technology for learning purposes and who would leap at the opportunity to become more familiar with VR technology.



It takes a Viking to...

PROTECT YOUR ASSETS



We don't mess around when it comes to your greatest assets. You need it **secure and battle-tested**, day in and day out, year after year.

Viking Entry Systems and Emergency Phones are built to last. Available Enhanced Weather Protection will provide added defense for outdoor use.

Say goodbye to unreliability, and hello to rugged durability. **YOU NEED A VIKING.**

Start planning your installation today!

715.386.8861 vikingelectronics.com







VR as a Recruitment Tool for Gen Z Students

Today's traditional college-age learners are members of Generation Z, or Gen Z. As Gen Z students mature, so will their expectations for learning experiences that provide them with a skill set essential to thriving in the future job market. Extended reality (XR), immersive technologies encompassing VR as well as augmented reality (AR), holds promise as a learning tool to satisfy Gen Z—and beyond on their own terms. Moreover, given Gen Z's documented affinity for gaming as well as their desire for acquiring problem-solving and practical skills, VR provides a confluence of experiential learning and engagement.

Current market demand for immersive learning in K-12 can illuminate the expectations of future learners bound for higher education. While only 5% of K-12 teachers surveyed in 2016 by Project Tomorrow used augmented reality or VR tools, Futuresource Consulting predicted in 2018 that 15% of U.S. schools would have a VR kit by 2021. Private





SANITIZE with the **ACF Series**

Calcium Hypochlorite Tablet Feeders

inorganic compounds to prevent dull and cloudy water.

maintenance product, it works with your filtration system to remove organic and

- : Safer than liquid systems
- :: Runs "Clean" Less Maintenance!
- : Simple, Efficient, and Durable
- :: Systems available for ANY size pool
- :: NSF/ANSI Standard 50 Certified

CLARIFY with the **VPF-20**

Poly-A Tablet Feeder

- Unique tablet clarifier
- : Easier than liquid systems
- Removes organic and inorganic compounds
- Increases filter effectiveness
- Proven cryptosporidium removal



AllChem Performance Products, Inc. Phone: 352.378.9696 FAX: 866.343.1216 email: vantage@allchem.com www.vantagewatercare.com



Copyright 2015 VANTAGE is a registered trademark of AllChem Performance Products, Inc.

Doors and Windows for Campus Security



Acoustical Doors with Built-In Bullet Resistance

Our acoustical doors protect against unwanted sound in campus labs, lecture halls, and more by exceeding the ANSI Standard S12.60-2002. Plus, they can be configured with a bullet resistance rating of UL 752 for added safety during an active shooter event.

Tornado and **Hurricane Doors**

During extreme weather, Krieger's specially designed tornado and hurricane doors are ICC 500-2014 certified and meet or exceed FEMA P-361-2015 and FEMA 320-2014 safe room criteria to keep designated campus areas safe. Plus, the thresholds are ADA compliant.

Unlimited Performance Combinations

All Krieger doors and windows can be manufactured in any combination of safety or other specialized needs—including acoustical, bullet and forced entry, radio frequency shielding, and blast/pressure resistance. Plus, all products can be customized by size, style, and finish, making them the perfect fit for your campus.



www.KriegerProducts.com

universities and colleges must take such data seriously to keep up with the evolving expectations of Gen Z students. Moreover, research already illustrates that VR in the classroom can be used to spark students' interest both before and after concepts are introduced. A recent study by Parong and Mayer ("Learning Science in Immersive Virtual Reality") shows that 81% of students who used VR in the classroom felt more motivated to understand the material treated in VR, were more interested in the material, and found the lesson more engaging overall than traditional, lecture-based methods.

Enhancing Learning Spaces with Innovative Technology

VR technology is just one way of using innovative technology to transform how students learn and collaborate. We know that students value aesthetics and comfort in learning spaces, but they also value access to innovative learning spaces that meet their evolving needs. The essential ingredient to such spaces is variety—that is, providing students with options not even they have necessarily considered. Consider the possibilities, for instance, of learning spaces equipped with unique software and moveable furniture, two features that empower students to collaborate and learn as they see fit. Similarly, ideal learning spaces should offer ample seating, wall-mounted displays for group work, large interactive touchscreen technologies, web cameras and microphones for web conferencing, multiple outlets and charging stations, as well as laptop checkout stations that contain software otherwise unavailable to students. The broader objective is to create zones of learning where students can work independently, in small or large groups, and where they can share their work to dedicated monitors or even project onto a single large monitor.

Innovative software technologies provide further ways of enhancing learning spaces. A few exciting examples include browser-based video conferencing, a shared whiteboard space that allows users to exchange and annotate content in real time, multi-camera support for capturing different angles in large gatherings, converting voice to text with real time transcription, saving and recording work on cloud servers, and sharing, mirroring, and casting devices or applications wirelessly.

Innovative Technologies and the Importance of Place

As private universities and colleges continue to adjust to the ongoing impact of the pandemic, there is a growing emphasis on the important of place for students, faculty, and staff, all of whom are reacclimating to campus life. Enhancing this sense of place by investing in innovative technologies can transform the campus experience for everyone, and continual planning and assessment of innovative technologies are integral to improving learning outcomes as well as increasing constituent

ONE SOURCE FOR ALL YOUR FLOORING NEEDS

Rubber & Vinyl Stair Treads for Interior Applications



Sheet Rubber



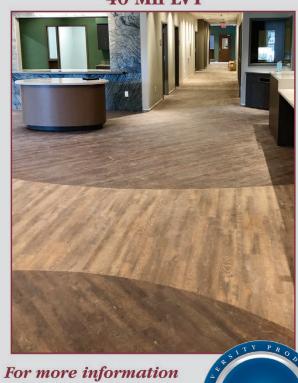
Entrance Matting



Rubber Stair Treads for Exterior Applications



40 Mil LVT



For more information visit our website at www.mussonrubber.com or email us at info@mussonrubber.com







engagement. We have an opportunity to integrate technology while also strengthening the social experience.

A key lesson, too, is that innovative technology brings talented people from disparate fields together, educators and students alike. If used to its potential, innovative technology encourages creativity, risk-taking, and collaboration. The effect is to generate further innovation, and this culture of innovation is precisely the goal in private institutions of higher education. After all, higher education is, at its core, a space where knowledge both proliferates and is made, day after day.

ABOUT THE AUTHOR: Dr. David Vinson has a PhD in English with specializations in transatlantic literature and cultural studies.

He is a committed scholar, teacher, and dad. If you ever meet David, avoid the subject of soccer. His fandom borders on the truly obnoxious.

Measuring Moisture is our Expertise. Accuracy and Reliability is our Strength.



Lignomat Moisture Measurement PO 30145, Portland OR 97230 Ph: 800-227-2105 FAX 503-256-3844

Email: sales@lignomat.com www.lignomat.com

Handheld meters for wood, drywall, concrete. We offer a wide selection.



Moisture Intrusion is the number one concern keeping buildings structural safe and healthy.

We offer measuring and monitoring devices to find problems and monitor repairs.

Call 800-227-2105 for a recommendation.

Monitor moisture and humidity. For short and long-term monitoring.



Report measurements over the Internet.

For all remote applications. and Building Surveillsnce.



BASKET TRUCKS www.royal-basket.com 800.426.6447



You Deserve the Cart that Works for You!



BRAND **EVOLUTION**

by David Hanna, Director of Marketing, NAC Products, Inc.

NEW LOOK, SAME QUALITY PRODUCTS

National Applied Construction (NAC) Products, Inc. NAC Products, Inc., the company that introduced the flooring industry to ECB® and crack isolation membrane technology, has unveiled a refreshed brand image with an updated logo and new website at the same domain www.NACproducts.com.

The refreshed brand identity reflects the evolution of the organization, founded in 1983 by Tom Duve. The original logo featured a dual-purpose acronym: known industry wide as "National Applied Construction," NAC also stands for the names of Tom's Children: Nick, Andy, and Christie. These family principles continue under the leadership of Tom's son-in-law and current president of NAC Brian Petit.

"We decided to execute a complete brand overhaul that would slightly alter the logo, transform our red and blue color scheme to a warmer black and green design that will stand out from our competitors and improve our website to be more intuitive and customer friendly," says NAC President, Brian Petit. "We've preserved the traditions of family values and American manufacturing, which are alive and present in everything we produce and it's very exciting to bring this new and fresh look to everything we are doing at NAC."

With pride and a commitment to quality, NAC has always manufactured its membranes in the United States. utilizing domestically sourced raw materials. For nearly 40 years, NAC has delivered exceptional value in high performance products for customers and the flooring industry throughout the world.

THE ORIGINAL **CRACK MEMBRANE**

As the developer of ECB, the first crack isolation membrane in 1986, NAC revolutionized the way decorative floors were installed by providing architects, designers and contractors greater flexibility in tile layout and flooring design.

Fast forward to 2005 and the ANSI Committee approved the A118.12 Crack Isolation Standard and in 2006. the method was added to the Tile Council of North America Handbook, solidifying crack isolation membranes as a proven solution.

That innovation was the beginning of an extraordinary line of NAC membrane solutions that expanded into waterproofing and sound abatement and has provided flooring distributors another product offering to protect their customers' flooring investment.

"The manufacturing and quality of our membrane products remains unchanged," says Petit. The transformation of our packaging design was a big undertaking, and we want to present a warmer color scheme that will stand out from our competitors."

CRACK ISOLATION, WATER-PROOFING AND SOUND CONTROL

The NAC line of membranes have been rigorously tested over the years and have continued to meet and exceed industry standards, A118.10 for water-proofing, A118.12 for crack isolation and A118.13 for sound abatement membranes.

In addition, all NAC sheet membranes, NAC TAC II primer and Sub-Seal® liquid waterproofing membrane, have been tested and certified Clean Air GOLD, by the independent laboratory, Intertek, and conform to California Department of Public Health (CDPH) Standard Method v1.2.

The "Pass" disposition indicates the products did not exceed the VOC limit for the private office, school classroom and single-family residence scenarios. The emissions testing was performed over a period of 14 days and based on the most stringent modeling scenario.

"This is an important achievement for NAC and our product offerings as more and more projects are being specified with products that contain no VOCs," said Petit. "Making products that are environmentally friendly has always been our goal and we are proud that our products hold up under rigorous testing and provide peace of mind for the flooring investment."



THE FUTURE

The redesigned nacproducts.com website features improved functionality and e-commerce capabilities to provide a more customer friendly experience. The website is still the destination for educational materials and support documents for all NAC products.

Growing our distribution network is of continued importance as we look to provide more coverage and access to our products on a local level.

"We know the success of NAC is directly tied to the success of our distributors," adds Petit. "We have introduced new starter options as we look to expand our distribution network, including a simplified onboarding process to get our products on distributors shelves quickly."

Add in the exceptional customer service and timely technical support provided by NAC, and the opportunity to become a distributor is a clear win-win.

NAC membranes have exhibited exceptional performance over the years and stood the test of time protecting millions of square feet of flooring installations. Our membrane systems, backed by a lifetime fracture-free performance warranty, are available for commercial and residential installations. For more information and to learn more about NAC, visit www.nacproducts.com.



pupnmag.com JANUARY 2022 39

Buyer's Guide 20 20 20











ATHLETIC FACILITIES/SPORTS & FITNESS/CAMPUS RECREATION

ABACUS SPORTS INSTALLATIONS www.abacussports.com

Abacus Sports installs various types of sports surfacing for gymnasiums, running tracks, tennis courts, weight rooms and athletic locker rooms. In addition to sports surfaces, we install synthetic rubber flooring for multi-purpose facilities, banquet halls, and other social events. We are a leader in synthetic flooring. Abacus can turn your facility into an ideal space to congregate for sports performances and social gatherings. We provide the synthetic flooring for both sport and recreational use so your facility can be used to its full potential. Our surfacing is resilient against heavy foot traffic, bleachers, and pointy shoes, which makes it perfect for multiple uses. Abacus specializes in inlaid platforms for weight rooms, and we helped create and develop this product by producing a sub-layer flooring that protects concrete from the heavy weights dropping. The level platform can help create a more effective weight room for your athletes. Customize your surfaces with Abacus.

AQUATIC ACCESS www.aquaticaccess.com

Aquatic Access offers a full line of water-powered lifts for in-ground pools and spas, above-ground pools and spas, portable spas, swim spas, and for most whirlpool, therapy, or rehabilitation tubs and pools, including those consisting of six-foot walls. We also build lifts for boats. docks, and cruise ships to provide access to pools and spas.

BISON www.IPIbyBison.com

IPI by Bison provides ceiling and wall mounted basketball backstops, gym divider curtains, batting and practice cages, gym floor covers, wall and stage padding, in addition to a wide selection of gym and field sports equipment for sports-related new construction and renovation projects. For over 40 years, IPI has provided quality gym equipment to schools, recreation centers, churches, health clubs, pay-to-play facilities, YMCAs, and virtually anywhere that indoor team sports are played. In 2012, IPI was acquired by Bison, arguably the industry leader in post-construction, indoor gymnasium, and outdoor field sports equipment. Operating as an independent division of Bison, IPI customers now can take advantage of Bison's advanced manufacturing capabilities, extremely broad product line, and creative product engineering. Located off I-80 in Lincoln,

ATHLETIC FACILITIES SPOTLIGHT

VANTAGE

www.vantagewatercare.com



The Vantage Water Care Program is a comprehensive water maintenance plan designed for commercial pool operators, utilizing chlorination, or bromination as the primary sanitation method. The Program combines the effective and reliable sanitation properties of chlorine or bromine sanitizers with the remarkable clarification properties of a new compound called Poly-A Tablets. These components are added to an overall water management framework that encourages sparkling clear water. The Vantage Water Care Program gives your commercial pool the highest quality water in the most efficient, operator-friendly and cost-effective program available. It is a straightforward operation consisting of a number of components. The size and installation of these components are carefully determined according to your pool's specific needs and demands.

ATHLETIC FACILITIES SPOTLIGHT

ROYAL BASKET TRUCKS www.royal-basket.com

Continual product development and enhancements have made Royal a recognized brand of material handling solutions for multiple markets. We manufacture basket trucks and specialty laundry carts in 12 vinyl colors, or in canvas or molded poly. Every product is made to order, and this allows us to customize our wire frame carts by making size modifications specific to a customer's environment when needed. In addition to slight modifications, we also design and manufacture custom concept carts. Our manufacturing environment is unique in that we have a full woods department, a welding department, and an industrial sewing department all under one roof. This allows us to produce orders on a short timeline to better meet your needs.

Nebraska, Bison has a longstanding reputation for quality, customer-centric service, on-time delivery, and is dedicated to creating U.S. jobs by maintaining over 90% of its manufacturing in the United States.

INCORD

www.incord.com

InCord is the leading provider of safety netting solutions for a wide variety of sports—soccer, lacrosse, baseball, and more. Products include custom field dividers, batting cages, backstops, and field goal netting. InCord makes netting for team and spectator protection around fields, over stadiums, and above dashers and bleachers. In addition to new construction netting, InCord can design custom sports netting to existing structures and spaces that renew what you already have; we can also add new, facility-enhancing netting solutions. Whether you're a facility owner, construction contractor, or facility director, InCord has exactly what you need-no matter the size of your project—with its wide selection of netting materials and overtwenty

years of experience. Visit https://incord. com/sports-division/ or call 860-537-1414 to learn more.

LIST INDUSTRIES INC. www.listindustries.com

From initial design to final manufacturing, Superior lockers by List Industries Inc. are engineered using state-of-the-art computer technology, ensuring quality you can depend on. The uniqueness of our Hollow-T framing system allows us the flexibility to custom design a locker to meet the specific requirements of your project. We welcome the opportunity to work directly with you to custom design a locker room environment that is productive and attractive, while at the same time cost-effective. Our results-driven team of designers, engineers, and sales professionals are available to assist you every step of the way from initial budget planning to final project closeout.

MICROFIT, INC. www.microfit.com

MicroFit, Inc. has been producing quality Fitness/ Wellness assessment software

JANUARY 2022 41

Buyer's Guide

and medical grade testing equipment since 1986. Several hundred colleges and universities have benefited by using a wide range of MicroFit products that are designed to evaluate, educate, track progress, and motivate students, faculty, and the community to adopt healthier lifestyles. We recently introduced the MF-1215 treadmill to complete the total MicroFit FAS-2 System Fit-Lab concept, an affordable package that fits an area of 12' x 12' and is guaranteed to upgrade any recreation facility seeking a total integrated approach that will enhance fitness/wellness assessment solutions. For more information call Rob Rideout at 800-822-0405, or you can schedule a Free webinar overview of the HealthWizard software suite.

SPORTSART AMERICA www.gosportsart.com

SportsArt has been an industry leader in innovative design and manufacturing excellence since 1977. The company is known for advancing industry standards and for positioning itself as one of the most creative manufacturers of premium

AUDIO/ACOUSTICS/AUDITORIUMS SPOTLIGHT



SHURE

www.shure.com

Shure has been making people sound extraordinary for nearly a century. Founded in 1925, Shure is a leading global manufacturer of audio equipment known for quality, performance, and durability. We make microphones, wireless microphone systems, in-ear monitors, earphones and headphones, conferencing systems, and more. For critical listening or high-stakes moments on stage, in the studio, and from the meeting room, you can always rely on Shure.

quality fitness, medical, performance, and residential equipment. SportsArt is one of the largest single brand manufacturers in the world, with its products sold in over 80 countries. Moreover, SportsArt contains over 500,000 square feet of state-of-the-art manufacturing space, and it designs, manufactures, and tests all equipment to rigorous TÜV quality standards. With hundreds of patents worldwide for innovative technologies, including the award winning ICARE™ system and the newly relaunched ECO-POWR™ Series that complies with CE

and UL certificates, SportsArt is the leading green fitness partner, developing products that are instrumental to rebuilding and sustaining lives.

AUDIO/ACOUSTICS/AUDITORIUMS

HEAR TECHNOLOGIES www. HearTechnologies.com

Hear Technologies is a world leader in pro audio and monitoring equipment, creating new standards in the settings of live music, recording studios, and worship. Our





End of Year Update

MicroFit welcomes Emory University and Florida State University

to our growing list of colleges and universities relying on MicroFit's premier fitness assessment platform for higher education fitness, wellness, and recreational programs.

If you are considering upgrading your fitness assessment programs to an elite standard, contact MicroFit today to discuss how we can help you transform your college's fitness assessments for optimal performance.















Ask MicroFit how we can help improve your campus wellness program! 800-822-0405 info@microfit.com www.microfit.com/campus-wellness

INNOVATION HAS NEVER SOUNDED SO GOOD. From traditional acoustical shells

From traditional acoustical shells to innovative, new active acoustic technology, trust Wenger.

Assumption CollegeWorcester, Massachusetts

<u>Wenger Product</u> Transcend® Active Acoustic System VAE® Rehearsal System Audience Seating Acoustical Panels Wenger PRCLANCY

CREATIVITY OF ENGINEERING

1-800-493-6437 +1-507-455-4100 www.wengercorp.com/acoustics

products are U.S. designed, and their build knob-based cue systems make personal monitoring easy. Not only are Hear Technologies products found in studios and live productions around the world, but they are proudly used by musical artists such as Bruce Springsteen, Jon Batiste, and Lady Gaga. They can even be seen on the hit television series Dancing with the Stars. We design with the musician and engineer in mind, and we're always working to make our products even better and more user-friendly. Because our equipment is easy to use and has a broad industry presence, higher education institutions such as Yale School of Music and Middle Tennessee State University Recording Industry choose Hear Technologies products for their hands-on learning spaces.

WENGER

www.wengercorp.com

The value that Wenger offers is in a class of its own, and no one puts more careful thought and effort into quality, or more emphasis on durability, versatility, and ease-of-use. Wenger understands how important it is to have products that last, products that provide flexibility with how you apply them, and products that transport easily and set up fast. We've learned this by listening to our customers—the driving force behind every product we build. In addition to Wenger's commitment to innovation is a tradition of outstanding customer service and support. Wenger stands behind each product with expert technical support, great warranties, as well as customer service that's responsive, thorough, and dedicated to your individual needs.

CONSTRUCTION/HVAC

CLEARSPAN

www.clearspan.com

Over our history, ClearSpan has worked on thousands of projects across dozens of industries, providing custom and turnkey building solutions that are both unique and functional. We've become renowned for our versatile structures, which have earned the nickname "Buildings of 1,000 Uses." When purchasing a structure from ClearSpan, our customers can rest assured that they will receive the exceptional service that ClearSpan is known for. Our Building Specialists have years of experience working within the industry, so they can offer invaluable advice and suggestions throughout the entire building process, ensuring that customers get a structure that is ideal for their operation.

DORLEN PRODUCTS INC.

www.wateralert.com

Dorlen Products, a water leak detection company, has manufactured surface water leak detection equipment since 1975. Our water leak specialists are dedicated to selling the highest quality, lowest maintenance leak sensors available today. Our leak sensing systems are rugged yet sensitive to detect even a thin film of water, and without false activations. Water Alert leak detection equipment is designed to maximize protection by offering continuous monitoring 24/7. Our water line leak detection equipment identifies small leaks such as condensate water overflow, chiller water leaks, plumbing line cracks, heating/ cooling piping leaks, outside seepage, and more, all prior to an occurrence of damage and downtime. The water detector alarm features vary by model.

DYNAMIC AIR QUALITY SOLUTIONS www.DynamicAQS.com

It is increasingly understood that indoor air quality (IAQ) impacts learning. Dynamic Quality Solutions manufactures high-efficiency air cleaning systems that improve IAQ, save energy and reduce operating costs. Dynamic Air Cleaners remove odors and VOCs in addition to ultrafine particles. The Dynamic V8® Air Cleaning System delivers MERV 15 performance and offers media change-out intervals measured in YEARS instead of months. Dynamic Activated Carbon Matrix™ (ACM) Systems allow for precise control of gas phase contaminants without the energy penalty and high maintenance costs. Dynamic Sterile Sweep™ UVC Systems provide high output UVC for the inactivation of biological contaminants. Dynamic Air Quality Solutions is a proud partner of ASHRAE headquarters renewal project.

INSPIRED TEC www.inspiredtecllc.com

We all want to believe that our indoor air is clean and healthy, and yet research tells us that indoor air pollution is a serious environmental health concern. The EPA reports that air inside buildings is five times more polluted than the air outside, and that polluted air causes 50% of all illnesses. This is an alarming reality since we spend 90% of our time indoors. Inspired TEC has a solution. Photocatalytic Oxidation is the newest generation of Proactive Air & Surface Purification, and it combats pathogens in the following ways: Flocculation, Molecular Dissociation, and Cluster Ions. Our online video library demonstrates multiple uses for PCO technology in some of our newest venues.

KALWALL® CORPORATION www.kalwall.com

Kalwall has provided museum-quality daylighting™ to building occupants all over the world for more than 60 years. Company founder Robert R. Keller, Sr. invented the original translucent sandwich panel in 1955, and no other company has dedicated more years, resources, creativity, and innovation into the science and art of daylighting. Kalwall is the most highly insulating, diffuse light-transmitting, structural sandwich panel in the world. Lightweight, shatterproof, and rapidly installed, Kalwall has unrivaled structural integrity that is far superior in performance and value to products that superficially may appear similar. Kalwall can function as part of the walls or roof of any building, or be an entire freestanding structure. Typical product applications include Wall, Window Wall and Curtain Wall Systems, Window Replacement energy upgrades, Skylights, Pre-engineered and Custom Skyroofs®, Clearspan™ Systems, as well as Canopies+Walkways.

CONSTRUCTION/HVAC SPOTLIGHT

HOPE'S®

HOPE'S® WINDOWS, INC. www.hopeswindows.com

Hope's custom steel and bronze windows and doors have graced the campuses of prestigious educational institutions in the U.S. for over 100 years—beginning with the company's first order for Cornell University in 1912. The unmatched strength of solid hot-rolled steel can sustain incredible structural load requirements, allowing Hope's to realize the precise design requirements desired for monumental openings in virtually unlimited scale and shape. Hope's manages this while also maintaining minimal sightlines and maximum glass area. Hope's prides itself on a long-standing commitment to safety and certification, subjecting its products to more third-party testing than any other steel window manufacturer. Whether newly constructed, retrofitted, or preserved for historical integrity, every window and door is built to last for a century or longer, and with minimal maintenance. Unmatched strength and performance, quality craftsmanship, environmental sustainability, and efficiency are just some of the features that make Hope's Windows an ideal long-term investment.



Explore Together

Higher Education allows inquisitive students to broaden their horizons.

Absen LED offers professors, university administrators, and other education officials the ability to show-case meaningful lectures and inspiring presentations that impact the students learning opportunities.

Absen LED is perfect for auditoriums, lecture halls, and classrooms, and other educational and athletic setting.

Check out latest case study video at Arlington ISD:

https://www.usabsen.com/about/video/





Contact info@usabsen.com or reach out to Absen representatives for more information.

KENYON INTERNATIONAL www.cookwithkenyon.com

Kenyon International is a domestic manufacturer of compact ceramic cooktops and the All Seasons™ electric grills available in 120V UL for use both indoors and outdoors. We offer unique and functional designs that incorporate the latest in cooking technology such as the next generation SilKEN®2, a high energy Induction cooktop that provides cooking by temperature or power setting with quick heat dissipation and user-friendly controls. Standard knob or touch control cooktops are available in 1 or 2 burners - 120. 208, and 240V UL, each with HOT and ON indicator lights. We also offer an exclusive 3-year product replacement warranty in addition to unparalleled customer service.

KRIEGER PRODUCTS www.kriegerproducts.com

Since 1936, Krieger Specialty Products has been a leading manufacturer of specialized door and window products for acoustical, blast resistant, bullet resistant, radio frequency shielding, thermal shielding, tornado, and hurricane applications. Built to your precise specifications, Krieger doors and windows have been the choice for premier schools and universities all over the world.

PVI INDUSTRIES www.pvi.com

PVI is a leading manufacturer of industry-best commercial and industrial water heaters, each fabricated from corrosion-resistant AquaPLEX® duplex stainless steel. PVI water heaters can be configured for any common energy source including natural or LP gas, oil, boiler water, solar, steam, electricity and waste heat. Water heaters range from instantaneous, on-demand water heating to storage water heaters. PVI has installed thousands of systems across the nation throughout a broad range of application and industries, those such as universities, restaurants, hotels, hospitals, apartments, correctional facilities, military barracks, and more. PVI proudly backs its water heaters with the industry's strongest warranties and service policy packages.

FLOORING

NAC PRODUCTS www.NACProducts.com

For more than 30 years, NAC Products has been an innovator of high-quality products for hard surface flooring and building applications. NAC membrane systems provide waterproofing, sound reduction, and crack isolation protection for residential developments such as high-rise condos, dormitories and hotels, as well as commercial projects like malls and airports. NAC membranes are laboratory tested and exceed the industry standard for sound abatement, crack isolation, and waterproofing membranes. NAC membranes have been featured in thousands of commercial, residential, and industrial applications worldwide, and they are the #1 architecturally specified, owner/contractor preferred, and lab tested membranes on the market today. Membrane systems that protect your flooring investment, that's NAC Products.



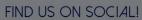


From check-in staples like tables and covers, to advertising banners, digital signage, tents, and everything in between, Post Up Stand has you covered. Shop Campus Essentials at PostUpStand.com/Campus

















Buyer's Guide

FLOORING SPOTLIGHT



MUSSON RUBBER CO.

MUSSON RUBBER

www.mussonrubber.com

For over 65 years, Musson Rubber has been a pioneer and leader in the development, manufacturing, and distribution of safety stair coverings and flooring materials. Musson Rubber specializes in stair coverings and entrance matting for commercial, institutional, and industrial use. Herein lies the most complete and comprehensive line of top-quality rubber and vinyl stair coverings, plus entrance mats for use in public buildings. Musson is also a major distributor of industrial rubber products. Representing over 100 different suppliers in major markets gives Musson the edge in providing competitive products and service in today's demanding environment.

WOOSTER PRODUCTS www.woosterproducts.com

Make every step a safe one. Wooster Products is a USA Manufacturer of anti-slip safety stair and walkway products. We manufacture products for any size project. In operation since 1921, our work includes transit stations, stadiums, schools, parks, as well as residential and office towers. Our brand names include the following: Stairmaster®, a renovation or safety enhancement product intended for heavy pedestrian traffic; Walk-A-Sured®, a water Clear Epoxy floor coating designed for use on wood, metal, tile, marble, terrazzo, and concrete; WP-70®, a heavy-duty two-part epoxy coating for a long-lasting, anti-slip durable solution; and FlexTred®, our anti-slip tape used for stairs, walkways, ramps, and more. Please contact us at 800-321-4936.

FURNITURE

BEVCO SEATING www.bevco.com

Proudly manufactured in the USA for over 70 years, BEVCO's ergonomic seating solutions are the perfect blend of quality, comfort, and affordability. BEVCO's products are an excellent choice for a wide variety of applications within the higher education space, ultimately making the difference in how you perform on a daily basis. Experience the BEVCO difference: Our made-to-order customization process ensures you're

FURNITURE SPOTLIGHT

EXEMPLIS

www.exemplis.com



For almost 25 years, Exemplis has been a leader in the industry—and we rank #1 in task chairs in the U.S. When customers paired our SitOnIt Seating products with sister companies IDEON and Symmetry, they could access a three-brand portfolio to build out their spaces. Although solutions were comprehensive, having to curate across three different brands offered an opportunity to streamline the experience. So, we're doing what the most innovative, forward-looking brands do: We're making everything easier for our customers. Not only that, but we're also dedicated to minimizing our impact on the environment. Our lean manufacturing practices allow us to conserve resources, eliminate waste efficiently, and ultimately design responsible products that are durable and long-lasting.

building a product that meets your exact needs; the 12-year warranty provides you with peace of mind while protecting your investment; our core line of products have been GreenGuard Gold certified, offering sustainable solutions that contribute to your overall wellness; and the unparalleled support at BEVCO ensures you are always 100% satisfied with your seating experience.

www. biofit.com

BioFit Engineered Products is a globally renowned designer and manufacturer of LEED-compliant ergonomic seating, GREENGUARD-certified cafeteria tables, book trucks, carts, and specialty products. Headquartered in Bowling Green, Ohio, we've been a furnishing innovator for over 75 years and provide solutions today for some of the most recognized names in science, healthcare, technology, industry, education, business and more. Our products are made to order with user well-being, performance and reliability at the forefront. Thanks to the modular construction of our seating, we can meet nearly any specification, and with our "mychair" online configurator, website visitors can create and request a quote for a model to fit their unique workplace, task and budgetary requirements.

CRAMER

www.cramerinc.com

Cramer designs award-winning seating for modern lab and healthcare spaces improving safety, longevity, and technical compliance for sensitive environments. Those who occupy labs and healthcare spaces are always moving. They have to be, since so many others are relying on them. So, we designed chairs to keep up. We believe in creating seating that adapts to you, with fewer parts, fewer seams, and fewer points of failure. Our streamlined offering represents form and functionality in hygienic and high-tech harmony, allowing our users to focus on the task at hand.

LANDSCAPING/ **OUTDOOR AMENITIES**

BILLY GOAT INDUSTRIES www.billygoat.com

Billy Goat Industries is the premier manufacturer of specialty turf products with a reputation for innovation, productivity, and quality. We offer a complete line of turf renovation and clean-up solutions for commercial and municipal needs serving landscape and grounds maintenance professionals. We carry Turf Renovation

LABORATORIES SPOTLIGHT

LABCONCO

www.labconco.com

Serving the scientific community since 1925, Labconco Corporation manufactures laboratory equipment, specializing in ventilation products such as chemical fume hoods and biological safety cabinets. Other product lines include freeze dryers and glassware washers. Labconco has ISO 9001certification, which stands as but one measure of its commitment to quality and consistency in design and manufacturing. Manufactured in Kansas City, Missouri as well as Fort Scott, Kansas, Labconco products are marketed worldwide to academic, industrial, life science, pharmaceutical, environmental, forensic, and clinical laboratories.





SUPERIOR
BUILDING
SOLUTIONS
FOR OVER
40 YEARS

INDUSTRY-LEADING WARRANTIES

ClearSpan structures are built to last decades into the future.

ENERGY-EFFICIENT DESIGNS

Save money on a monthly basis and maximize profitability.

EXPERT CONSULTATION

Industry experts are on staff to provide invaluable advice.

METAL AND FABRIC BUILDINGS

Building solutions for any application in any industry.



www.clearspan.com 1.866.643.1010



Netting Solutions for All Applications



- Drone/UAV Nets
- Spectator Safety
- Property Protection
- Enclosures
- Retractable Netting
- New or Retrofit

Authorized Dealers Nationwide

860.537.1414 incord.com



LANDSCAPING/OUTDOOR AMENITIES SPOTLIGHT

DEEPSTREAM DESIGNSwww.deepstreaamdesign.com

DeepStream Designs provides innovative, modular outdoor products with a Lifetime Structural Warranty. Our coordinating, customizable product line includes attractive yet rugged trash and recycling receptables, large planters and durable liners, benches, windbreaks, screen walls, and equipment enclosures, towel tissue, and return cabinets, service carts, as well as other fixtures. DeepStream products are engineered and constructed using the principles of sustainable design so they will endure for generations, thereby reducing the impact on the earth's resources and delivering the lowest cost of ownership over time. Handcrafted by American craftsmen using yacht-building techniques, our modular construction allows for damaged pieces to be replaced at the manufacturer's direct cost via our unique "Core Replacement Program." Trademark marine-anodized aluminum extrusions have no paint or powder coating to fail. DeepStream's commitment to sustainable design includes our support for the planting of over 530,00 trees

through Trees for the Future (www.trees.org) in our customers' honor.

Equipment, including the most comprehensive line-up of Aerators on the US market, Hydro-Drive Sod Cutters, and Overseeders. In Clean-up Equipment, we have Outback® Brushcutters, a full line of Vacs, Force™ Blowers, and Debris Loaders: 13, 14, 18, 25 & 35 HP. Dual shredding system with Pirana™ blade for the best reduction of any debris loader on the market. Contact Gail Trudeau, Assistant Manager of Marketing, at trudeau.gail@billygoat.com.

KAY PARK RECREATION www.kaypark.com

Kay Park Recreation has been a manufacturer of commercial outdoor furniture since 1954. We offer a large selection of park and playground equipment as well as commercial grade site furnishings that include outdoor tables, grills, benches, trash containers, drinking fountains, planters, umbrellas, bollards, shade canopies, and bike racks. We have a complete line of bleachers and grandstands, as well as outdoor athletic equipment, play systems, and a rental-duty fiberglass pedal boat. Please browse through our selection at our website, and feel free to contact us if you have any questions.

MEAN GREEN MOWERS www.meangreenproducts.com

Mean Green Mowers offer the electric advantage, and we provide four great advantages to using Mean Green's electric equipment over traditional gas-powered tools: zero emissions, low noise, zero gas, and low maintenance. Leveraging the Electric Advantage takes away the stresses of traditional gas-powered mowers. Without the harmful fumes, obnoxious noises, little maintenance, and no more trips to the gas station, there is now more time to focus on the actual job! Mean Green has taken the extra work out of maintaining the yard; simply flip the switch and cut the grass. Discover how the electric advantage can revolutionize your campus.

DeepStream

Designs

LIFE SAFETY/SECURITY

AIPHONE SECURITY COMMUNICATION SOLUTIONS www.aiphone.com

Aiphone is your partner in finding proactive security solutions for schools and campuses. With visitor screening technology, campus-wide communication, paging integration, and student housing intercoms, we help create a learning environment that places a premium on safety and security. We design superior products and technology you can trust, and users have relied on our quality intercoms for over 50 years. Known for design simplicity, technical excellence, and backed by award-winning support, we offer highly configurable systems for a wide range of campus security needs. Every Aiphone system is the result of painstaking attention to detail, and our standard is to create products that are engineered and tested with reliability in mind. The Aiphone team is made up of dedicated, hardworking individuals who

SELF-SERVICE PUPPING AWARD-WINNING SELF-SERVICE PUPPING AWARD-WINNING AWARD-WINNING AWARD-WINNING AWARD-WINNING AWARD-WINNING SELF-SERVICE PUPPING AWARD-WINNING AWARD-WIN

Space-Saving • Experience-Enhancing • Forever-Flexibility



Mix-N-Match Laptops And Now 110V Portable Power Outlets



A New Innovative Approach To Student Battery Access

OVER 4 MILLION ANNUAL CHECKOUTS AND GROWING 4,0000



Trusted Technology Branded to Your Local Look-n-Feel

LAPTOPSANYTIME™

Automated Checkout Kiosks

1-877-836-3727 • LaptopsAnytime.com

LIFE SAFETY/SECURITY SPOTLIGHT



AGF MANUFACTURING INC. www.purgenvent.com

AGF Manufacturing Inc. manufactures specialized products for the Fire Protection Industry and was founded on the principles of reliability, versatility, and compatibility. Over the years AGF has introduced a number of original products that accommodate the varying demands of the fire protection industry, and we are continually working in the field to improve existing products and introduce new ones. While addressing the needs of fire protection, we strive to provide the best products backed by a strong commitment to customer service. Our close interaction with the fire protection community has helped us introduce a beneficial product line. By engineering more intuitive products, AGF helps you manage your fire safety systems more efficiently, resulting in more reliable systems that save resources.

consider one another a family. We are engineers, technicians, customer support representatives, shipping professionals, operational team members, marketing specialists, and local sales experts—and we are all eager to support our customers.

AMERICAN DIRECT www.americandirectco.com

With over 25 years of experience, we're on your side, providing support at every turn to build safe, efficient, and profitable spaces. From idea to installation, we offer specs, logistics, field service, and maintenance. Always innovating—that's what we do. We bring you the best in security from door install and logistics to highly innovative software that puts you in control. American Direct is the only company combining Division 8 and Division 28 product, service, and expertise to deliver integrated security solutions at the physical door opening. We provide a seamless experience for our users at

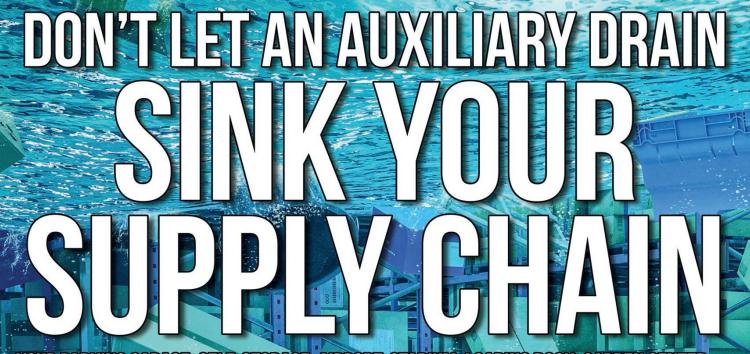
every step-from pre-construction, logistics, installation to integration, access control, and field service.

CHASE SECURITY www.chasesec.com

Systems, Chase Security specializes in the design manufacture of wire & flat metal products. We custom design and manufacture a variety of products for the life/safety, security, fire, sound & communication, and electrical industries. Our products include wire guards, expanded metal guards, security pedestals, perforated quards, hoods, towers, cameras & enclosures, projection screen guards and microphone & conference system enclosures. Our wire enclosures are designed to protect thermostats, strobes, switches, and other devices against vandalism or accidental damage. The wire enclosure provides ease of installation and maintenance of equipment, once installed. Our







YOUR PARKING GARAGE, SELF-STORAGE, AIRPORT, STADIUM, LOADING DOCK, GARDEN CENTER, ...

Æ

FLOODELIMINATOR

- Stops Flooding due to Frozen, Vandalized, or Improperly Maintained Fire Sprinkler System Auxiliary Drains
- For Dry and Pre-Action Fire Sprinkler Systems
- Compatible with Compressed Air and Nitrogen Systems
- No Power Required
- Automatically Resets
- Allows Condensation to be Drained Normally
- Retrofit onto Existing Auxiliary Drains
- Made in the USA



www.agfmfg.com



VIKING

VIKING ELECTRONICS www.vikingelectronics.com

Viking Electronics designs and manufactures over 500 security and communication products, those including Emergency Phones, Entry Systems, Paging Interfaces, Amplifiers, Mass Notification Systems, Hot Line Phones, Auto Dialers, Enclosures, and more. In addition to our extensive analog line, we offer a large selection of IP based solutions. Viking's VoIP products are SIP compliant, with features such as built-in relays and automatic noise canceling. We are continually developing new ideas using the latest technology to expand our product lines. As always, Viking products are designed, manufactured, and supported in the U.S. and are backed by a two-year limited warranty. Since Viking's origins in 1969, we've encouraged our customers to "Call Us First." So, the next time you're wondering if we design a product for a particular application, don't hesitate to call—and if we don't design it, we'll do our best to direct you to someone who does! wire products are manufactured in a variety of sizes, styles & finishes, and sold to OEM accounts and distribution. We offer expanded metal guards for smoke detectors, speakers, bells, strobes, wall-mounted movie projectors, and interior lights.

ICOM AMERICA INC.

www.icomamerica.com

Today's communications industry requires thinking outside the box. Icom's Network division covers growing IP/WLAN and LTE-CONNECT solutions. Icom's IP radio allows users to quickly establish a high-quality network in a building, and it does so by programming and connecting to an existing WLAN network. An IP radio system is especially ideal for users (colleges, hotels, hospitals, restaurants, etc.) who want to create a radio network using their own wireless network. Communicate far and wide with LTE-CONNECT, Icom's LTE radio solution. Using 4G and 3G networks, the IP501H allows for instantaneous push-to-talk communications throughout North America. This new LTE radio solution is perfect for teams in need of a simple and yet wide-area communication solution. AIR. LAND. SEA. Visit www.icomamerica.com/ network

IOTA ENGINEERING

www.iotaengineering.com

IOTA provides critical emergency Life Safety egress performance for existing lighting systems. In the event of a loss of normal power, IOTA emergency lighting products enable existing fixtures to deliver code-required emergency illumination along the paths of egress for

AMERICAN SLIP METER®

SLIP & FALL PREVENTION SINCE 1993

OUR 925 IS AN NFSI APPROVED TRIBOMETER FOR DCOF TESTING



Our 925 is an automated DCOF meter that tests to NFSI B101.3 and ANSI A326.3. No drive wheels to slip on ramps, bathtubs, or grout lines. Test stairs in four directions.



Our 825A is an economical manual SCOF meter that tests to ANSI/NFSI B101.1-2009. Easy to operate for both dry and wet tests. Used across the globe for many years.

We offer sales, service, and rentals of SCOF and DCOF Tribometers. We manufacture the ASM 825A SCOF and the ASM 925 DCOF meters.

www.americanslipmeter.com

info@americanslipmeter.com . 941-681-2431

NEW UPDATED CLAIMS

ALL LIFE STACES OF BEDBUCS

SCORPIONS

FLIES

MOSQUITOES



800 359-4913 • STERIFAB.COM

University Communication Solutions

Introducing Icom's LTE-CONNECT System





Instantaneous push-to-talk communications throughout North America. The LTE-CONNECT radio system provides telephone style conversations, packed with conventional two-way radio features. These license-free radios operate on an Icom controlled, private and secure 4G network. This LTE radio solution is perfect for those support, safety and security teams in need of simple, yet wide-area communication solutions.

- License-Free
- Full Duplex Communication
- Individual / Group / All Calls
- Mobile Companion (IP501M)
- Text Messaging
- Fixed Monthly Cost
- Compact & Lightweight











www.icomlte.com connect@icomamerica.com



building occupants. Available emergency solutions include field installable emergency LED drivers, micro, mini, and central emergency inverter systems, emergency ballasts for fluorescent and LED retrofit tubes, and energy-saving auxiliary control devices.

THOR GUARD, INC. www.thorguard.com

Thor Guard is the leader in lightning prediction and is committed to maximizing emergent technologies in the development of systems that provide automatic notification of hazardous weather conditions. Thor Guard uses a highly sophisticated sensor and computer to measure and analyze the electrostatic field in the atmosphere. Lightning originates within this field, thus allowing Thor Guard to make calculations predicting its occurrence even though there may be no visible evidence of lightning. Lightning detection systems require the occurrence of an actual lightning strike before a warning is given, and many times this is too late. Such is why multiple airlines, government agencies, and other industrial users are utilizing Thor Guard.

MAINTENANCE

AMERICAN SLIP METER®, INC. www.americanslipmeter.com

American Slip Meter® has manufactured tribometers since 1993. Our meters are durable, reliable, repeatable, and fully supported. Floor safety programs and floor testing together equals safe floors. We now offer a dynamic coefficient of friction device, the ASM 925, in addition to our static coefficient of friction device, the ASM 825A. American Slip Meter®, Inc. has played a vital role in floor safety and manufacturing drag sled type slip meters, and we are actively involved in the ASTM, ANSI, and NFSI committees that develop and maintain walkway testing standards. Craig Stephenson, Vice President.

CHARLOTTE PRODUCTS www.charlotteproducts.com

More than 30 years ago, a visionary in the field of sustainability teamed up with three chemists to bring effective, healthy, and environmentally responsible cleaning solutions to the market. Charlotte Products was born from their shared vision. Charlotte Products has since grown into a global leader for sustainable cleaning innovation. Along the way, we've been defined by our ability to predict the cleaning industry's needs and trends, just as we have become known for our unique ability to match those needs with innovation, simplified knowledge transfer, and expertise. We find success by constantly improving our healthy, safe, and sustainable cleaning solutions.

LIGNOMAT www.lignomatusa.com

When needing to know a wood's moisture content, let Lignomat help. We carry a full line of pin and pin-less moisture meters, meter packages, and related accessories. Our handheld moisture meters are designed for professionals that include architects, building inspectors, carpenters, contractors, restoration specialists, as well as other working professionals who need a reliable method of determining moisture levels in wood, sheetrock, gypsum, and other



Energy efficiency you can bank on.

With the need for energy efficiency ever increasing, finding a fume hood that meets your goals can be difficult. Why exhaust precious air when Labconco has the ideal ductless solution? Our newest Echo™ and Airo™ fume hoods pair the world's most advanced containment with Neutrodine® Unisorb filtration technology. Labconco. No duct, no doubt. Iabconco.com/echo









Commercial Grade



All Day Power



User Friendly



Planet Friendly





SIGNAGE AND **PROMOTION SPOTLIGHT**

POST-UP STAND www.postupstand.com

Showcase your message anytime, anywhere! Our innovative banner stands and large format printing services are perfect for trade shows, lobbies, and point-of-sale displays. From our website, view our customers list as well as customer testimonials attesting to their satisfaction with our products and services. Our banner stand displays are lightweight and easy to use, so you will look like a pro wherever you show. Our new tabletop Post-Up stands are perfect for trade show exhibits or countertop displays. Please take some time to review our trade show banner displays and products on our website, and e-mail us with any of your questions.

building materials. Each moisture meter measures the material's present moisture levels determines if the material is ready to use, needs further inspecting, or requires discarding.

STERIFAB® BY NOBLE PINE PRODUCTS COMPANY www.sterifab.com

STERIFAB® is a Disinfectant: a bactericide that destroys microorganisms. It is also a Fungicide that kills fungus, a Sanitizer that reduces levels of micro-organisms from inanimate environments, a Viricide that kills viruses, a Mildewcide that kills mold and mildew, a Germicide that kills germs and disinfects, a Deodorant that destroys pathogenic odors, a Bacteriostatic that inhibits bacterial growth, as well as a Fungistatic that inhibits fungal growth. STERIFAB® is even an Insecticide that protects against lice, ticks, dust mites, centipedes, bed

bugs, fleas, sowbugs, ants, silverfish,

roaches, and firebrats. STERIFAB® will not stain, has no added perfume or objectionable odor, is fast drying, crystal clear, and will not harm fabrics, carpets, or most areas.

ULINE www.uline.com

Uline, a family-owned business, is the leading distributor of shipping, industrial and packaging materials businesses throughout North America. Our easy-to-use, 700+-page catalog contains over 32,500 packaging, shipping, industrial, and janitorial products, each ready to ship today. Order by 6 P.M. and your order ships the same day! 99.5% of our orders ship the same day, with no backorders. Uline brand products combine the best quality with the best value. Our buyers search worldwide for the finest products available at competitive prices. Place your order 24/7/365 by phone, fax, or online. A knowledgeable customer service rep is always available to





COMMAND ATTENTION. UNLEASH IDEAS.

Whether it's a lecture, a class, or an online course, speech intelligibility is critical to productivity, student participation and achievement. At Shure, we have over 90 years of experience enabling great communicators to connect with their audience. You can leverage our wealth of knowledge in acoustics, audio, and wireless technology, to create immersive learning environments that enhance the student experience.



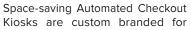
With the support of our marketleading global team, learn how to make audio work for you.

https://shu.re/pupnmag



TECHNOLOGY ON CAMPUS SPOTLIGHT |

LAPTOPS ANYTIME www.laptopsanytime.com





each facility and designed around major laptop/tablet models in 12-bay host "starter" and 12- and 18-bay "companion" stations. Mix multiple device types in the same system and then smartly deploy multiple systems. Stations are integrated to ILS and/or local LDAP or Active Directory. Additionally, web camera, email notifications, and a full suite of inventory management, audit trail, and management reporting functionality make the system one-of-a-kind. Replace 30 desktops and regain over 150 square feet of comfortable seating as well as lower power usage by up to 90%. This "new" multi-use seating can accommodate and still serve those who want a comfortable place to read a book or those who bring their own digital device with them. Those needing a Laptop or even a 110V Power Charger can check out a device at our innovative kiosks and relax in a new, transformed atmosphere.

assist you. Eleven locations across North America speed delivery and minimize freight costs. You get what you need, when you need it, and at the lowest cost. Satisfaction guaranteed! Try any product we sell for a full 30 days. If not completely satisfied, return it to us for a no-hassle refund or credit.

TECHNOLOGY ON CAMPUS

ABSEN INC.

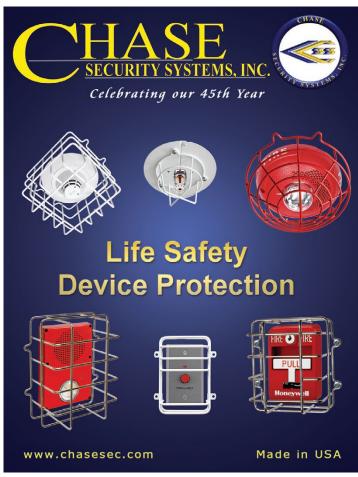
www.usabsen.com

Absen Inc. is the American subsidiary of Absen, a leading LED display manufacturer, and is based in Orlando, Florida. With thousands of installations across the country, Absen Inc. has quickly become the LED manufacturer of choice for a variety of prestigious projects. Highlights include sporting venues for the NBA, MLS, and NBC; casino installations for MGM Grand and Caesars Palace; premier events including the Ultra Music Festival, Comic-con, and the Emmys; and digital signage in the heart of NYC's Times Square.

KMC CONTROLS

www.kmccontrols.com

For 50 years, KMC Controls has been an independent American manufacturer of open, secure, and scalable building automation and technology solutions. In short, we're Building Geniuses®! We team up with leading technology providers to create innovative products that help customers increase operating efficiency, optimize energy usage, maximize comfort, and improve safety. From our home in northern



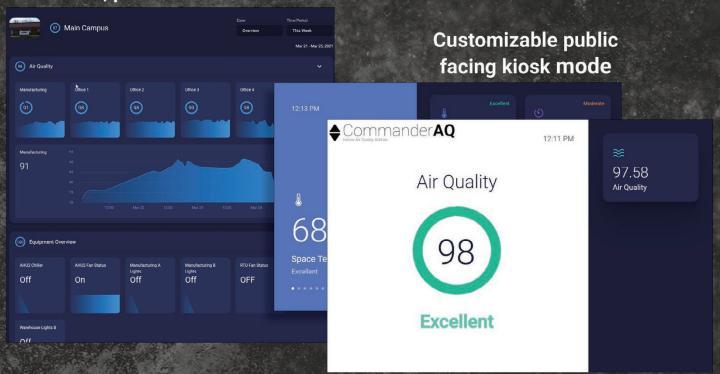


Indoor Air Quality beautifully

REIMAGINED



Detailed, personalized backend





TECHNOLOGY ON CAMPUS SPOTLIGHT

SMARTD=SKS

SMARTDESKS

www.smartdesks.com

SMARTdesks offers more than just buying computer lab desks or conference tables as a generic commodity. We offer person-to-person design team interaction and collaboration with our customers. Together, project by project, we are shaping conferencing and education for the 21st century. Every space is different: SMARTdesks computer desk, computer lab and conference table solutions provide a configured solution for your space and needs. When you are looking for a full-scale classroom, computer lab furniture or conference room design solution, rather than a desk-in-a-box, think SMARTdesks. Our specialty is designing for your space and pulling together our teams in collaboration with your IT integrators. Using cloud-based technology to exchange ideas, concepts & drawings in a holistic integrated cloud platform, we bring together our teams to reach configured solutions to fit your needs, your space, your environment.

Indiana, we deliver these solutions to a global network of system integrators and distributors. In fact, our products are controlling buildings of all sizes and types around the world, including the most sustainable office building in North America. We stay ahead of technological innovations through active engagement with industry-wide technology initiatives and partnerships.

TOUCHNET

www.touchnet.com/credentials

TouchNet OneCard VIP is a campus ID credential, access, and declining balance payment system that runs in the cloud, is synced with a college or university's student information system, and manages the broad range of permissions, privileges, and financial authorizations required by modern campuses. Our campus credential solution transforms how students interact with your campus at nearly every access point, and we deliver the insight and actionable data you need to understand student engagement, streamline operations, simplify processes, and make better, informed decisions.

TRANSPORTATION

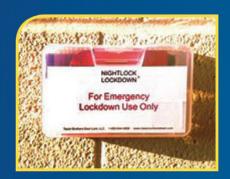
NATIONAL BUS www.nationalbus.com

The Ultra Coachliner is the industry leader. This high-end motorcoach has the smooth ride, capacity and luggage space of a traditional coach bus, at only HALF THE COST to own and operate.



NIGHTLOCK® LOCKDOWN

SECURE CLASSROOM IN SECONDS







SIMPLE · FAST · SECURE

FOR EXTREME EMERGENCY SITUATIONS

The Nightlock Lockdown Door Barricade allows a teacher to immediately lock the door from inside the classroom, eliminating exposure during a hostile intruder situation. This device makes it virtually impossible for an intruder to break through an entry door.

- · Simply add this safety device to classroom doors
- · Works with outward and inward swing doors
- No need to replace existing hardware
- One time solution easy to install
- · Lockdown in seconds

NIGHTLOCK classroomlockdown.com CALL TOLL FREE 1-855-644-4856



MC's Gore Arts Complex to Open in 2022, Serve as Artistic Link to Clinton Community

From the moment Mississippi College obtained the old Clinton Junior High School building in 2010, Dr. Samuel M. Gore, the "Founding Father" of the MC Art Department, knew how to maximize the new facility. While establishing the art department in the 1950s and nurturing its growth by recruiting remarkable faculty and students into the program, the internationally renowned Christian artist recognized the need for enhanced space that would allow students the necessary room to flex their creative muscles.

from a generous charitable foundation, the renovation and design of the school building, originally constructed in the 1940s, will be done by CDFL and Alliant Construction. Reconstruction began immediately after Thanksgiving and is expected to be completed by the fall academic term. "The Gore Arts Complex and its community space will give people a new and inspiring reason to visit our campus," says Dr. Blake Thompson, president of MC. "This facility represents the latest chapter in MC's long legacy of excellence in art programs and commitment to faith. It's so

"It's called the Gore Arts Complex—arts with an s—because it will incorporate music and theater. Musicians will be able to perform in the band hall, and there will be a theater in the auditorium," says Gearhart. The auditorium can also be used for large classes or as a gathering space for MC or members of the Clinton community. The Gore Arts Complex will also include specific studios for drawing, painting, sculpture, papermaking, pastels, and woodworking. It will feature an outdoor, covered kiln courtyard for firing ceramics that was high on Gore's list of priorities.

For Gore, there was little question the junior high building could one day be renovated to serve that very purpose. "I believe Dr. Gore's imprint is on everything in our department, and it will be forever," says Dr. Randolph B. Miley, professor and chair of art at MC. "He spent his whole life building what we've got now and dreaming about possibilities for the future. We think about him all the time. His work is evident in the department and in the gallery."

Gore died in 2019, but the facility he envisioned will become a reality when MC officially dedicates the renovated school building as the Gore Arts Complex in 2022. Funded in part by a \$1 million gift

fitting that this facility, where new generations of artists will learn, be named in memory of Dr. Samuel Gore," Thompson continues; "Dr. Gore lived to share the story of Christ and tell that story through art. There is no better example for future artists to follow. Dr. Gore transformed lives through his art and his teaching, and MC will continue that legacy in this building that bears his name."

Gore's daughter, Dr. Judy Gearhart, fondly remembers attending classes in the former school building when she was growing up in Clinton. The MC graduate, artist, and former professor at the University of Mississippi Medical Center says she is delighted the project will not only add to her father's legacy

at MC, but also rejuvenate a beloved part of the town's rich history. "People who grew up going to that school like I did will be excited to see it having a new life," Gearhart says. "They are preserving a lot of the building's old architecture, restoring the old wood floors, the old terrazzo floors, keeping the old storage cubbyholes in place, the old coat racks. A lot of people will remember the old school plays, eighth-grade graduation, school talent shows in the old auditorium, Halloween carnivals, things like that. It's exciting to see those memories refreshed."

The Gore Arts Complex will include specific studios for drawing, painting, sculpture, papermaking, pastels, and woodworking. It will feature an outdoor, covered kiln courtyard for firing ceramics that was high on Gore's list of priorities. "Dad's passion was seeing a wonderful new facility for sculpture and clay artwork to be developed and to see the potential for bronze casting," Gearhart says.

The complex is planned to encompass more than just a facility for fine arts, Miley says.

"It's called the Gore Arts Complex—arts with an s—because it will also incorporate music and theater," he says. "Musicians will be able to perform in the band hall, and there will be a theater in the auditorium." The auditorium can also be used for large classes or as a gathering space for MC or members of the Clinton community.

And, of course, the work of Gore's skilled hands will be evident throughout the complex. "Dr. Gore left us a lot of sculptures, a lot of paintings, all housed in the Gore Gallery right now," Miley says. "It would be a great tribute to Dr. Gore and his ministry if we could display several artworks in the new complex; it would reinforce the mission of our department."

Gearhart says she is pleased that a sculpture from a member of the well-known Lassetter family will also adorn the complex, further linking the renovated facility to the city of Clinton. Featuring the internal mechanisms of a piano, the work was completed by the late Rev. Dr. Stuart Lassetter when he was a student at MC. Stuart Lassetter's father,

ON-DEMAND TECHNOLOGY FOR ON-THE-GO STUDENTS

Self-Service Dispensing Kiosks

- Space-Saving
- Experience-Enhancing
- Forever-Flexibility

Break Down Barriers and Join 100+ Campuses In Making LaptopsAnytime Automated Dispensing Kiosks Your Go-To Self-Service Solution for On-the-Go Students.

Dispense Wide Range of Dell, HP, Lenovo & Apple Laptops and 110V Portable Power Chargers and Accessories.

Build Your Own Kiosks *Mixing-N-Matching* Laptops, Tablets And Now *110V Portable Power Outlets* Separated By Row Module.





OVER 2.5 MILLION
ANNUAL CHECKOUTS AND GROWING

2,500,000

Trusted Technology Branded to Your Local Look-n-Feel



1-877-836-3727 • LaptopsAnytime.com

the late J.M. "Prof" Lassetter, was an MC alum, charter member of the 50 Year Club, and longtime superintendent of Clinton Consolidated School. Lassetter Drive on the MC campus was named in his honor.

Stuart's daughter, Carrie Lassetter Reeves, an MC graduate and art professor at the Christian University, was one of Gore's former students who, after his death, helped complete the third disciple in his Christ in Gethsemane sculpture on the MC campus. "It seems so fitting that Dad's vision is coming true with this facility, but that it's also carrying on the Lassetter legacy as well," Gearhart said. "I'm just always excited to see things that are such a part of the history of Clinton to be preserved in such a good way."

While final plans for the Art Department are still pending, Miley said graphic design will stay in the Aven Fine Arts Building, and printmaking and interior design will remain in Farr Hall. All other fine arts programs will

move to the new complex. He described the announcement of the Gore Arts Complex as being among "the most amazing" in his career. "I have to pinch myself to believe this is really happening," he said. "We've talked about having a new place for fine arts since the late 1970s ... the potential of this building is remarkable, because it will have a multidisciplinary effect. With the new auditorium, we'll have the opportunity to do outreach to the community with art. Once we get things running, I think the ideas are just going to start generating quickly. And it will attract more artists here to study."

Gearhart said she hopes the Gore Arts Complex will be a lasting reminder to faculty, students, and visitors of her father's dedication to the University, the community, and the Creator. "I hope they can grasp his love and passion for education in the arts," she said. "His heart was always to glorify God through the arts, and he loved MC, he loved

his students, and he was absolutely passionate about art education. To see an entire art complex that makes that possible is a vision that he wanted everybody to share. I hope that it's something the whole community can get behind and support through donations, participation and encouraging the arts."

MC welcomes gifts to the Gore Arts Complex in memory of Dr. Samuel Gore, in honor of an artist or future artist, or to support the MC arts program. For more information on giving opportunities, visit www. mc.edu/gorecomplex.

ABOUT THE AUTHOR: Mississippi College is a private Baptist college in Clinton, Mississippi. Founded in 1826, MC is the second-oldest Baptist-affiliated college in the United States and the oldest college in Mississippi.





MANAGE THE ENTIRE CAMPUS EXPERIENCE RIGHT FROM YOUR PHONE WITH 360U.

With the 360u mobile app from TouchNet, you can improve the student experience. The app syncs with campus systems to enable management of the broad range of permissions, privileges, and financial authorizations required on campus – all with a single sign-on.





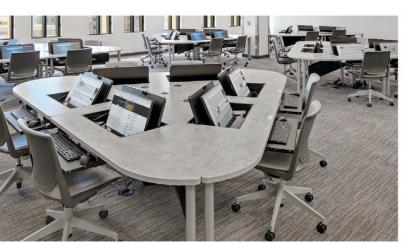
PO Box 1903 Pelham, AL 35124





SMARTflor®

Power & Data: Anywhere, Anytime!



2021 installation of SMARTflor® and SMARTdesks® Exchange Active Learning Furniture $^{\rm m}$ at Texas A&M Library.

©2021 CBT Supply, Inc. dba SMARTdesks® All rights reserved. SMARTflor®, Exchange Active Learning Furniture™, flipIT® and SMARTdesks® are trademarks of CBT Supply, Inc. flipIT® US Patent No. 7,509,912

Running an organization is complicated. With SMARTflor®, powering it is easy.

- * Enjoy on-demand access to power and data connectivity with SMARTflor® Computer Floor.
- * We provide plans, wiring diagram, ramps, rails, and full-service installation.
- Choose custom carpet colors to suit your space.
- Relax: no core drilling or demolition required.
- Move outlets any time without special tools or labor.



