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THE MAGAZINE OF THE NATIONAL WOOD FLOORING ASSOCIATION

APR/MAY 2020



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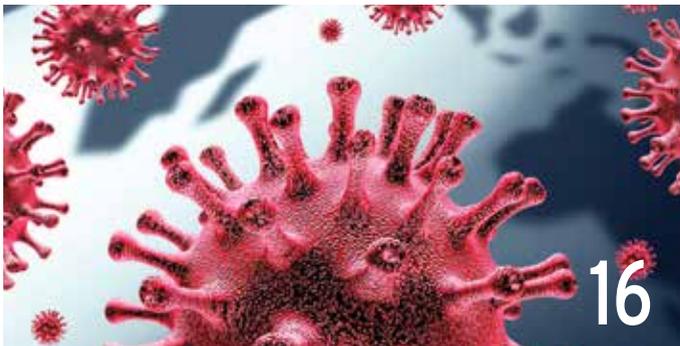


ON THE COVER

The New NWFA Wood Flooring Installation Guidelines

By Burt Bollinger

The new publication represents the most comprehensive revision since the guidelines were first published in 1988. Read about the history, the overhaul, and more.



Coronavirus Impacts the Wood Flooring Industry

By Libby White Johnston

Find out how companies are reacting to the business ramifications of COVID-19, as well as hidden opportunities and productive ways to spend a slow period.



Effective Repairs: Tips for Color Consistency

By Dean Cardin and Andrei Kerpan

Practical advice on how to make scratches go away, or at least be less obvious to the naked eye.

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CONTENTS

Industry Insights

20 Government Affairs

Looking to 2020.

By Dana Lee Cole

22 Market Matters

Time to Act?

By Connor Lokar

24 Market Matters

Implications of U.S. tariffs on wood flooring imports.

By Santo Torcivia

28 Designer Insights

Top 5 trends for 2020 and the new decade.

By Emily Morrow Finkell

Business Best Practices

32 COVID-19 Resources

Interpreting the Families First Coronavirus Response Act

By Brent E. McClure

36 Legal

Considerations about legal marijuana and your business.

By Norma Zeitler and Barbara F. Dunn

40 Finance

The importance of cash flow management.

By Dana Rogers

42 Sales Savvy

Are you creating enough personal value?

By Paul Reilly

44 Marketing

Marketing in the time of coronavirus.

By Katrina Olson

48 Reaching A&D

Staying the course with specification.

By Ron Treister

At the Site

76 Abrasives

The importance of abrasive choice in floor repairs.

By Greg Mihaich

80 Equipment

Avoid costly mistakes and repairs for your sanding equipment.

By Shawn Carrier

82 Inspector

The pitfalls of offering remedial action in an inspection report.

By Drew Kern

86 Tech Talk

Maximum board replacement in an existing wood floor.

88 Health & Safety

The hidden dangers of improper respirator use.

By Burt Bollinger

94 Sponsored Content

The problem solver.

By Shaper Tools

Product Focus

98 Spring Product Showcase

112 Sanding Equipment/Abrasives

Also in this Issue

6 Chairman's Cut

By Craig Dupra

8 Wood Stock

By Burt Bollinger

50 Sponsored Content

Covered from start to finish.

By Mike Brezina

90 NWFA Resources

117 New Products

118 Overheard on NWFA Podcasts

119 Ad Index

120 Final Coat:

CEO's Message

By Michael Martin

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Shifting Gears

This isn't the magazine we expected you to be holding right now. It was supposed to be our annual NWFA Wood Flooring Expo edition of *Hardwood Floors* magazine.

This isn't what you expected for your business right now either. Many across our industry have gone from being booked solid and on a growth trajectory to complete uncertainty.

That's why this issue was quickly refocused and recreated. We want to be a resource for you and provide information that can help your business during these challenging times.

It is such a new paradigm to not know what is going to happen next. All of the planning for day-to-day operations has gone out the window. "One problem at a time" is our new mantra. An employee sick day is now a 10-day furlough with no return without a doctor's note. Attrition and worker safety are a real concern.

My company donated N95 masks to local healthcare professionals to help with the personal protective equipment shortages they are facing at hospitals. A close relative is an ICU nurse, and he said this will save lives. I've heard of many others in our great industry doing similar things to make a difference where they can.

I have been reading a lot of what many futurists are saying, and I think we are all in for big and unseen changes with everything from business to sports to education. Positioning your business so that as much as can be done without

person-to-person contact will serve everyone going forward. The NWFA is way ahead of most, with our ability to put so many resources online.

While the 2020 NWFA Wood Flooring Expo was canceled due to the COVID-19 pandemic, there are ways to engage with the NWFA from home. You can even work to increase your value during this time. For example, digital badges and CCUs can be earned via the online NWFA University (NWFAU). There are about 200 courses, and the installation courses are being updated to reflect the NWFA's new Installation Guidelines (see more about the Guidelines on page 54).

Previously recorded Expo presentations, including Tech Zone demos from 2016 through 2019, may be viewed in NWFAU. You'll also find a wide variety of courses related to installation, manufacturing, sand and finish, and sales. In fact, becoming a Certified Sales Advisor can be done solely online.

NWFA webinars are a great way to learn about the latest products and tools from industry manufacturers, and can be used to fulfill continuing certification units (CCUs) for NWFA Certified Professionals. These webinars are hosted on the second Wednesday of the month at 2 p.m. CST. They are recorded and added to NWFAU for future viewing as well.

Try to look for the bright spots and opportunities for your business now, so you'll be ready when things ultimately pick back up. And, remember, we are all in this together. ■



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A **FOCUS** ON THE FUTURE



PHOTO COURTESY OF BURT BOLLINGER, NWFA

By Burt Bollinger

Training and inspiring the next generation who will take the hardwood flooring industry into the future has to begin somewhere. In Wisconsin Heights, Wisconsin, this education is starting early, thanks to the efforts of a generous NWFA member and an enthusiastic, forward-thinking school staff.

As a result of their combined efforts, high school students at Wisconsin Heights High School are getting a unique hands-on experience with hardwood and possibly laying the foundation for a career in the hardwood flooring industry.

“I was kicking around new ideas for my construction class, and I met Mike Wagner from Wagner Flooring. He mentioned there was an NWFA program out there designed to get schools involved in



hardwood flooring. I thought that sounded like a great idea,” says Mason Pouch, Tech Ed Instructor at Wisconsin Heights High School. “A lot of schools do rough carpentry, but very few actually focus on more finished trades.”

As a school board member, Wagner brought his idea to the school’s principal, who agreed it would be beneficial for students.

“Thanks to the NWFA, this has been a great way to get my students involved in learning about careers in trades such as the hardwood flooring industry.”

– Mason Pouch, Tech Ed Instructor at Wisconsin Heights High School

“I’ve been doing this for 20 years, and it’s a great career. The classes are a fantastic learning opportunity and help to show the kids what could be available to them in the future. I also wanted to do my part to help address the skills gap our industry is currently facing,” says Wagner. “I brought the idea to the school administration, and they agreed and adjusted their construction program to allow for a section on wood flooring to be taught.”

In addition to introducing the idea, Wagner also assisted by donating his own materials and equipment to the school.

“There was a list of materials they needed, and I decided I would look through my equipment and see what I could donate. I donated all the nailers, mallets, and as much specialty wood flooring equipment as I could,” says Wagner.

Meanwhile, Mason Pouch visited NWFA headquarters in Chesterfield, Missouri, to attend a “train-the-trainer” hands-on class that would allow him to better instruct his high school students.

“The training that I went to was awesome, but more than that, the NWFA provided me with an individualized curriculum that I was able to bring back to Wisconsin Heights and use as the basis of my classroom instruction,” says Pouch. “They were able to tailor the lessons to my needs and my school. We had a nice, healthy balance of working in the classroom with the NWFA curriculum, paired with hands-on work in the shop. I found that the kids really like having both.”

Today, Pouch’s students experience several weeks of classroom instruction using the NWFA curriculum, covering some basic science of the industry, such as the basics of moisture content. The final week and a half of the course focuses on the actual installation.

“Thanks to the NWFA, this has been a great way to get my students involved in learning about careers in trades such as the hardwood flooring industry,” says Pouch. “If nothing else, they will walk away with the appreciation of ‘this is what is going to go into my house in the future.’” ■



Wood Stock

MANUFACTURER MEANDERINGS

- AHF Products appointed Mike Bell as the company's Chief Commercial Officer (CCO). Darrell Keeling will be joining AHF as its new COO.
- Mullican Hardwood Flooring, which is celebrating its 35th anniversary in 2020, announced three new engineered flooring collections available exclusively through Mullican distribution partners.
- After 38 years of making custom hardwood flooring and moulding, Robert Lemke retired from Saroyan Hardwoods.
- Moravia Hardwoods LLC was fined nearly \$26,000 for cutting more than 100 trees in Iowa state forestland.
- UZIN recently announced the addition of Tom Hart as Technical Sales Representative to the UZIN North Texas Team.
- Wagner Meters announced the addition of Jason Wright to the sales team as a Business Development Specialist for New Products.



A COMMUNITY THANKSGIVING

By Burt Bollinger

When a fall left a young woman named Christina reliant on a wheelchair for mobility, her family's home required a rapid transformation to accommodate her needs.

In addition to the challenge of reconfiguring an existing home, time was also a factor. After spending several months in rehab, Christina would soon be arriving home. Unfortunately, her family lacked the necessary resources to do a full remodel of the home.

While the family acquired a used lift to help her up the stairs of the two-story home, there were other urgent needs, including wheelchair-friendly flooring. Christina's father began to inquire if there was someone in the community surrounding Boise, Idaho, who could possibly replace the carpet in her room.

Tim Beadoin and Todd Chase at R&R Hardwood answered the call and rapidly spearheaded an effort to not only transform Christina's room, but the entire home.

For her to move through the house easily in her wheelchair, the flooring would need to be extended throughout the entire upper level of the home. Other needs also became apparent. The doors would need to be widened and the shower needed to be accessible.

"One of our customers is a policeman who does floors on the side and he is involved in a lot of community projects. He explained the situation and came to see if I knew anyone who could help," explains Chase. "Originally, his request was simply for assistance with the bedroom flooring. However, when we dove in a bit further, we realized

someone would need to replace all the flooring in the home to make it work.”

As the needs increased, so did the pressure when it was discovered that Christina would be arriving home in just 10 days, which just so happened to be the day before Thanksgiving. In a race against the clock, Beadoin and Chase moved quickly to begin contacting various businesses to help with the project.

“I worked with Dee Dee Nash, who is our purchaser at R&R Hardwood. Dee Dee contacted other vendors in our area, explained the family’s needs, the timeframe we were working with, and asked them to donate the materials. Thanks to her persistence, within literally hours, we had everything we needed,” says Chase.

Hillsboro Hardwoods provided the 4” unfinished white oak flooring free of charge. Wood Shapes provided the vents, Glitsa provided the finish, and Woodwise provided the filler, also free of charge. With the needed materials procured, the next step was to get the materials installed in time for Christina’s arrival.

“We provided materials, and installers Teyan Curtis and Dave Shores volunteered to install and sand and finish the floors, along with about 15 police officers who were off duty. They installed, sanded, and finished about 1,000 feet of flooring in three days,” says Chase.



Before



After

PHOTOS COURTESY OF R&R HARDWOOD

To finish the rest of the home on time, more helping hands were needed. During the next 10 days, more than 40 people helped with different parts of the project. Understanding the short timeline, volunteers arrived early and stayed late to make sure the home was ready when Christina arrived.

In addition to the new wood floors, a team of volunteers removed carpet and baseboards, painted the walls and cupboards, built ramps, and widened the doors.

Looking back on the project, Chase says he was inspired at how quickly the community was able to come together to assist.

“It was beautiful to behold because it happened so quickly,” says Chase. “My hope is that it will allow us to do more of these types of projects, as there’s really nothing better than helping out your community when the opportunity to do so arises.” ■

DISTRIBUTOR DOINGS

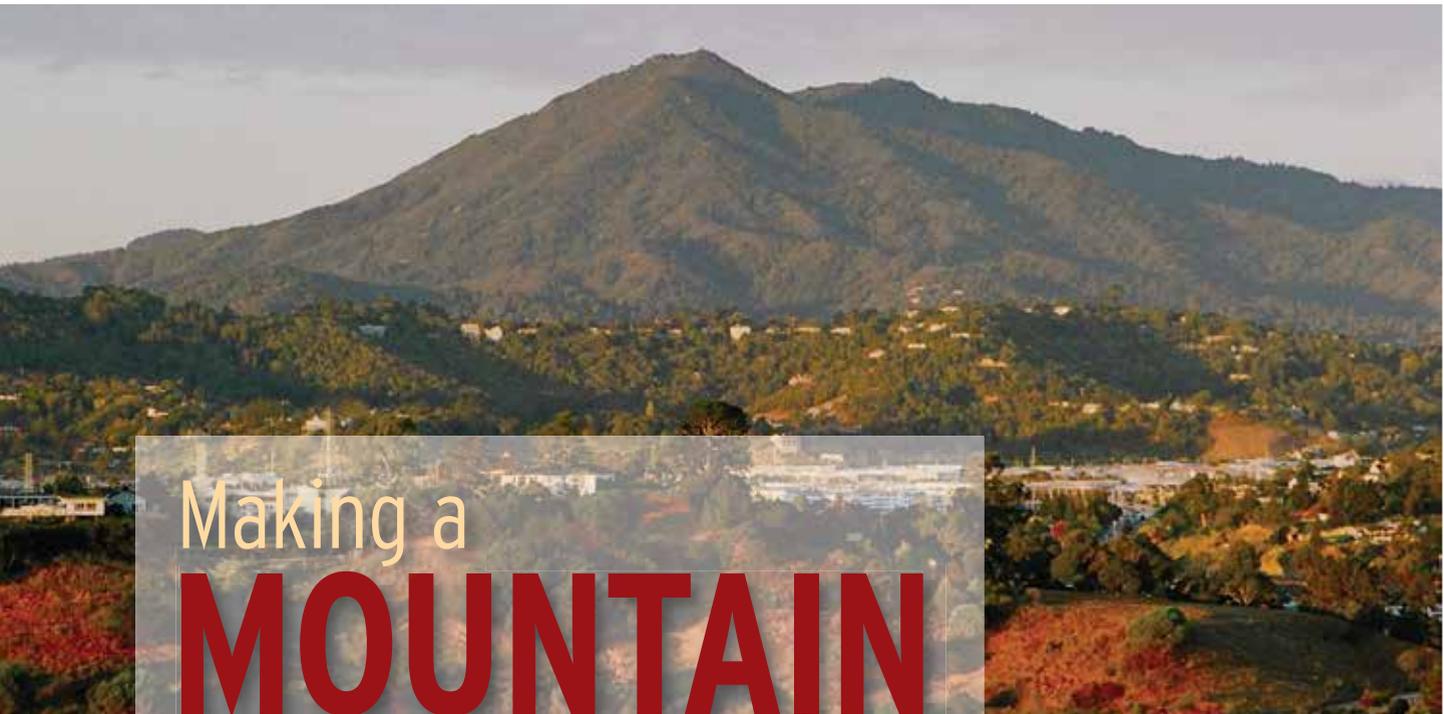
- Fishman Flooring Solutions has named Greg Paul regional manager of the firm’s Mid-Atlantic Region.
- Wagner Meters named Fishman Flooring Solutions as its Distributor of the Year for the second consecutive year.
- Galleher LLC has announced the acquisition of Sunwood Distribution in Midvale, Utah.

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Making a

MOUNTAIN

UNDER FOOT By Burt Bollinger

The natural beauty and versatility of hardwood make it an ideal medium for artists looking to make a dramatic impact on a space. However, seamlessly incorporating a stylized mountain into a floor and making it immediately recognizable using only wood and stains can be a challenge.

“We received a call from a contractor who had been working with an architect to install a piece of artwork into a hardwood floor,” explains Mark Whatley, Production Manager for Amber Flooring. “The location was a restaurant in Marin County, California, that has an amazing view of Mount Tamalpais outside its window. We were asked if we could try to do a stylized rendition of the south side of the mountain on the floor of the restaurant.”

While Whatley was provided a helpful rendering of what

the final image on the floor should look like, that would only be a start, with much of the actual work needing to be done on-site. Before that work could begin, the first step in the process was ensuring the colors and textures of the wood were right.

“To create the mountain, we decided we would use 3 1/4” inch solid reclaimed oak wood floor that we had leftover in our warehouse. Our plan was to pre-finish everything based on an outline provided from the architect,” says Whatley.

“Our colorist made color samples based on the image provided to us. We experimented and created coloring to ensure the shading on the mountain would appear as natural and attractive as possible,” says Whatley.

Once the colors created by Amber Floorings’ colorist were approved by the architect, Whatley and his team began the process of preparing the wood.

“We wire-brushed and textured the material, beveled it, and used a water-based stain



To determine the size and scale, Mark Whatley, Production Manager for Amber Flooring, and his team began at the bottom of the mountain.



ALL PHOTOS COURTESY OF AMBER FLOORING

by Basic Coatings. We then used a dry fast sealer by Bona, and two coats of Bona Traffic water-based satin on top,” states Whatley.

With the raw materials ready, the next step was to visit the restaurant and begin the installation process. While they had the elements and a guide to work from, preparation was far from complete.

“Once we got out to the job site, the hardest part was determining how long the individual pieces were actually going to be,” explains Whatley. “We didn’t know the exact dimensions, because while an architect can tell you that you have a 10 by 10-foot or 12- by 12-foot area to work with, until you actually get in the room, you can’t be certain. We had to take the area given to us, and then custom make everything to fit. It was a lot of trial and error to make sure we duplicated the architect’s drawing. We knew everything was going to be at a 45-degree angle, it’s just having the dimensions...we had to break all that down in the space that was given to us.”

To determine the size and scale, Whatley and his team began at the bottom of the mountain.

“With our finished planks of wood at the ready, we cut each piece, beginning with the base of the mountain. We then began working our way up from there. Once we got the bottom part of the picture done, we then knew what size the rest of the image would be,” says Whatley.

Looking back at the project, Whatley’s advice for someone doing a similar project is simple:

“Know your space, know your dimension, and give yourself enough time to do the job right. That was our approach, and it worked out well,” says Whatley. “Now, when you are sitting in the restaurant, you can see the mountain from the window, and when you look at the floor, you see it there too.” ■

CONTRACTOR CORNER

- The National Wood Flooring Association published a new edition of the NWFAs Wood Flooring Installation Guidelines. The new publication represents the most comprehensive revision of the Installation Guidelines since they were first published in 1988.

RETAILER ROUNDUP

- AHF Products is launching the Robbins® brand of hardwood flooring exclusively to NFA members and specialty retailers.
- Lumber Liquidators announced that Dennis R. Knowles has resigned as President and CEO and as a member of the Board of Directors. Charles E. Tyson, the Company’s Chief Customer Experience Officer, was appointed Interim President and Principal Executive Officer.





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Coronavirus

impacts the wood flooring industry

The coronavirus (COVID-19) pandemic is rapidly evolving. At the moment, schools, restaurants, and retail stores are closing, events are canceled, and states are issuing stay-at-home orders to slow the spread of COVID-19. While working from home is becoming a new normal, for most in the wood flooring industry, that isn't an option.





According to Travis Fritzel, owner of Perennial Hardwood in Fort Collins, Colo., his company was still receiving deposits for new projects as of mid-March, but he expects his company's schedule will have to be fluid for several months.

"We have not had anyone postpone; however, new leads have dropped between 50-75 percent of our normal average," Fritzel says. "We cater to a mid to high-end residential market, so no new construction and remodel delays have affected us."

"Currently, I am focused on making sure myself, employees, and Perennial Hardwood are in a stable position to ride out several months of little or possibly no work," Fritzel adds. "We have stocked up on two months of supplies from our wholesalers. In these uncertain times, maintaining strong communication with our clients has been paramount in our daily operation."

Mike Somodean, owner of M.S.C.S. Inc. in Roswell, Ga., is being cautious and has had to pause some projects. "Since we are mainly focused on lived-in residential, we are definitely feeling a slow-down in new leads and requests for bids," Somodean explains. "While we still have work booked for several weeks, we expect at least part of that to be postponed until people get at least some sort of certainty about the situation."

At C&R Flooring in Westwood, Mass., Chris Zizza says they are speaking daily with customers and moving things around while facing obstacles such as the city of Boston shutting down construction projects.

"They gave about seven days to wind down and get out of there, realizing you could be in the middle of a project. How do you plan for that and how long is that going to last? I had a crew that was supposed to start on a project, and the owners of the building said there will be no work allowed until further notice," Zizza says.

AHF Products, one of the industry's largest hardwood flooring manufacturers, is based in

Mountville, Pa. Right now, they are practicing social distancing, hygiene practices, and work-from-home options where possible.

"As the states continue to take actions, we expect there will be some impact on order rates, but the magnitude is still unknown," Wendy Booker, Vice President, Marketing and Product Development for AHF Products, says.

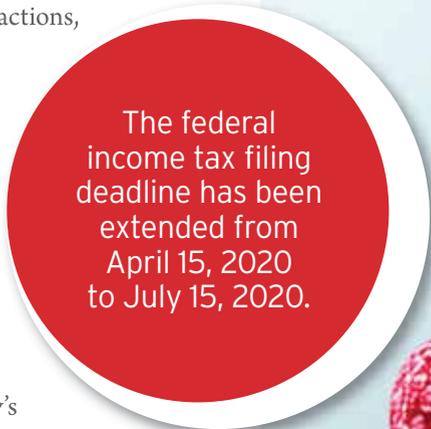
The same goes for distributors like Derr Flooring Co., headquartered in Willow Grove, Pa., where the company's pro shops and warehouses in the state have had to close for the time being. Showrooms also are closed, the outside sales team is working from home and not allowed to visit customers, and the customer service team is working remotely.

"Almost all of our retail customers are closed, so we definitely have seen a downturn in our business," says Rick Holden, COO of Derr Flooring Co. "Quoting activity for future projects also has dropped considerably. Our contractor base continues to complete existing jobs, but there is not much booked past early April."

PREDICTING OUTCOMES

In the March 2020 quarterly United States Market Monitor Report, Santo Torcivia, President of Market Insights LLC, notes that COVID-19 is a major threat to the U.S. economy. However, he states that the U.S. economy has been on a positive, but moderating, growth path and predicts it will absorb the shock of this threat and rebound and gain its forward momentum, if strong and decisive efforts are directed at restarting the U.S. economy quickly.

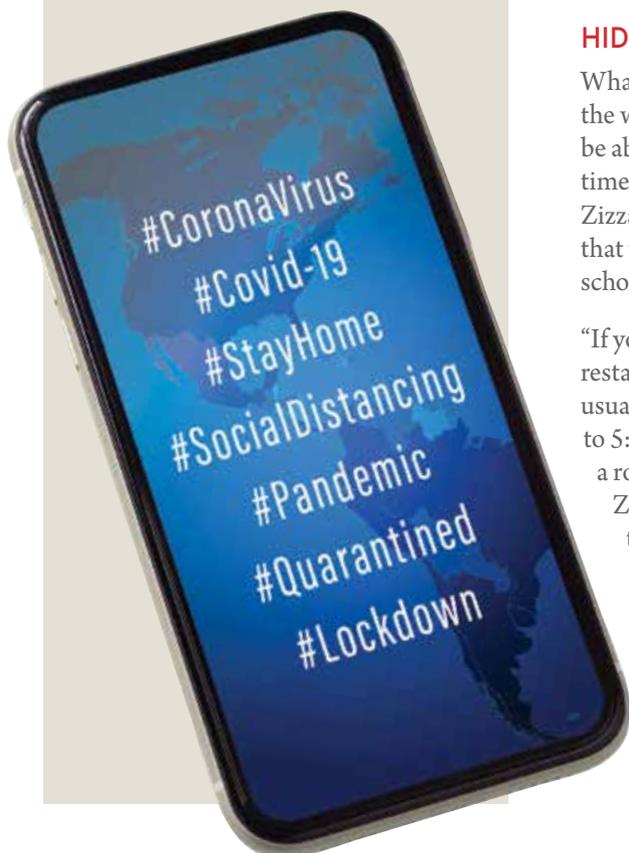
"All viruses are serious matters that require sober assessment, and there is much to learn about the nature and veracity of the Coronavirus," Torcivia writes in the report



The federal income tax filing deadline has been extended from April 15, 2020 to July 15, 2020.

HELPFUL RESOURCES

- Centers for Disease Control and Prevention (CDC)
<https://www.cdc.gov/coronavirus/2019-ncov/index.html>
- National Institutes of Health
<https://www.nih.gov/health-information/coronavirus>
- Occupational Safety and Health Administration (OSHA)
<https://www.osha.gov/SLTC/covid-19/>
- U.S. Small Business Administration
<https://www.sba.gov/page/coronavirus-covid-19-small-business-guidance-loan-resources>
- World Health Organization
<https://www.who.int/health-topics/coronavirus>



summary. “Context is important to soberly assess the situation, and how the consumer is influenced and ultimately reacts will largely determine the direction of the economy this year.”

While it’s tough to know how long the severity of the situation will last, as of late March, companies were hoping that all of 2020 would not be lost.

“Overall, we still believe that we can have a strong second half if the threat of the disease passes in the next 30-45 days,” Holden says.

“As things settle down, we expect retailers to seek out options to recoup lost profit dollars in their business,” Booker explains. “We know consumers walk into retailers truly wanting wood floors. We also know that wood floors provide much greater bottom-line dollars to retailers for when they are sold. So it’s a true win-win for flooring retailers to focus on wood.”

HIDDEN OPPORTUNITIES

What opportunities are there that the wood flooring industry may be able to take advantage of for the time being, or once things stabilize? Zizza suggests looking into places that usually never close, such as school gyms or restaurants.

“If you do commercial work, restaurants never close. You’re usually doing it on the 2:00 a.m. to 5:00 a.m. shift for six nights in a row, but now they’re closed,” Zizza explains. “You might want to think about businesses that have a hard time closing and have hardwood floors in them. They could be a ripe prospect right now for getting their floors done while nobody’s in the building.”

There is also the thought that as people spend more time at home in the current state of affairs, they may take a long, hard look at their flooring.

“The monetary value wood floors add to a home – as well as its natural warmth – speaks to the benefits that wood floors provide, especially now as more and more of us are hunkered down at home for personal and professional reasons,” Booker says. “It reminds us of the importance of the home environment to make us feel safe and secure, and brings out our nesting instincts. It also brings a new focus to the importance of wood’s attributes: sustainability, durability, and the ability to stand the test of time. We need these attributes more than ever.”

IN THE MEANTIME

Given the shortage of personal protective equipment in hospitals across the United States, some distributors and installers are helping their communities by donating N95 masks to healthcare professionals. Somodean did this with N95 masks he either already had or was able to purchase. And, as he waits to see how the COVID-19 situation unfolds, he will spend time with family and prepare so that when things pick back up, he can hit the ground running.

“My hopes are that the workforce will be maintained, and ideally, most businesses will use this slow period to maybe train staff on certain aspects that are overlooked when schedule pressure doesn’t allow it,” Somodean says. “It might also be a good time for businesses to establish or fine-tune their marketing, perform equipment maintenance, stock up on inventory, and other similar efforts.”

New marketing campaigns are also something Fritzel suggests taking advantage of right now. Otherwise, he plans to be with family and look at ways to decrease overhead by making spline, medallions, and stair noses in their shop.

“The main opportunity I see is to stay vigilant and motivated as I plan on increasing Perennial Hardwood’s market share in this downtime, regardless if it means a decrease in overall work,” Fritzel says. “No one knows when, but this will pass eventually and should be seen as an opportunity to set in place new ways you can distinguish yourself from your competitors.”

Zizza is working on a business plan and had some of his team make samples so they are ready the next time a client requests them.

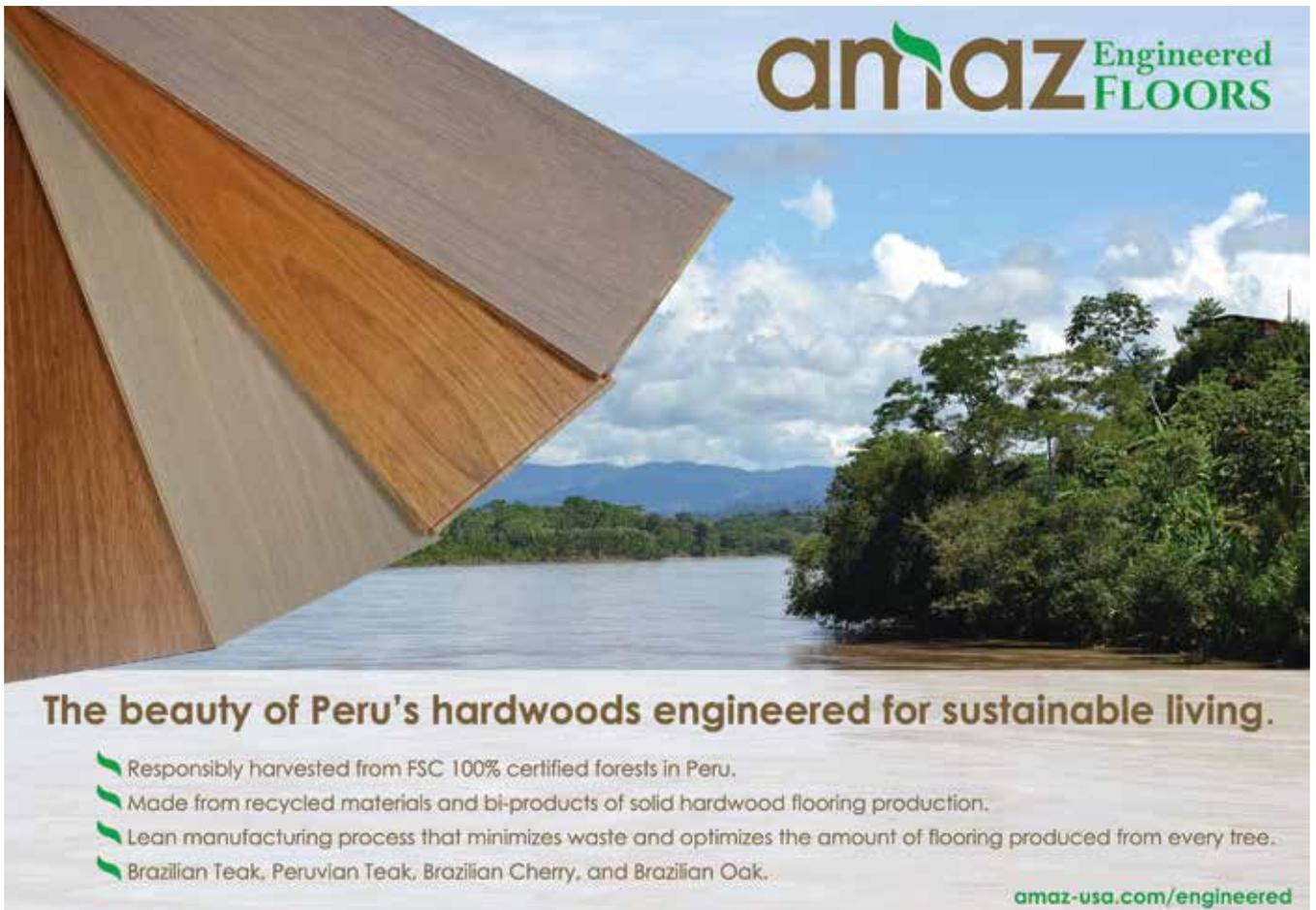
“Six weeks ago it was so busy; everything was jamming and great. You’re thinking about passing on jobs, and all of the sudden you don’t want to pass on anything. Think about the headache job you didn’t want to take; maybe you need to take it,” Zizza advises. “Right now, it’s about getting as many projects into your calendar and moving

forward with that because you have to stay busy. It will run its course, but while it’s running its course, the key phrase is cash flow.”

As the situation changes by the minute, the NWFA and *Hardwood Floors* want to serve as a resource to the wood flooring community during this unprecedented time. Visit hardwoodfloorsmag.com for daily updates on coronavirus-related industry news, event cancellations, and resources you may find helpful. ■

Libby White Johnston is the Publisher of Hardwood Floors magazine. She can be reached at libby.johnston@nwfa.org.

The Small Business Administration is offering low-interest loans to small businesses, including sole proprietorships and self-employed individuals, that have been severely impacted by COVID-19. More information on the SBA’s Economic Injury Disaster Loans can be found at sba.gov/disaster.



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LOOKING TO



There is no denying that 2019 was one of the most trying years in recent memory for the greater hardwood industry. This fact was not lost as the 2020 Hardwood Federation Board of Directors and Hardwood Federation PAC Board of Directors held their annual winter meetings in February in Washington D.C. As always, it was a packed couple of days of discussion, networking, and planning for policy and advocacy action in 2020.

The first order of business was to welcome the members of our 2020 Board of Directors and HFPAC Board of Directors. The Federation Board provides strategic

direction for advocacy priorities and outreach efforts, as well as oversight of our budget and other administrative functions. The HFPAC Board is instrumental in helping to raise PAC dollars to support our congressional allies and in identifying those we should consider for financial support. These groups are vital to our efforts on behalf of the industry and we rely heavily on their insight and guidance.

Finishing out a two-year commitment as Hardwood Federation Board President is NWEA representative Rick Holden of Derr Flooring, who will be ably supported by Vice President Matthew Smith of Smith Creek. The NWEA will be represented by a total of four outstanding hardwood industry leaders on the Hardwood Federation and Hardwood Federation PAC Boards. The other NWEA representative to the Hardwood Federation Board is Don Finkell of American OEM. The two NWEA representatives sitting on the HFPAC Board are immediate Past President, the one and only Tommy Maxwell of Maxwell Hardwood Flooring, and Dan Natkin of Mannington Mills Inc. The HFPAC Board is led by newly minted President Bob Miller of Frank Miller Lumber.

The Boards were briefed on the great deal of work done in 2019, with most of the conversation focusing on the massive undertakings regarding trade with China. Trade is one of the most difficult policy issues to navigate in D.C. and the hardwood industry faced significant pressures related to the ongoing trade war with China. However, positive developments for the industry began to roll out starting with the announcement that the U.S. and China agreed to a “Phase One” trade deal in December. According to conversations with the Office of the United States Trade Representative (USTR) officials, wood products, including hardwood and hardwood lumber, are included in the agriculture bucket. Hardwoods were prominently featured in White House press releases and in the agreement notes.

Two more significant developments were announced in February. First, the Chinese announced that a number of products, including hardwood lumber and logs, were eligible for exemptions from the retaliatory tariffs pending application from Chinese companies and approval from the Chinese government. This action became mute on February 21 when the Chinese announced all tariffs on hardwood lumber and logs would be lifted for one year starting on February 28.

Positive as this news is, it is important to remember that we still have challenges to face in the coming months. China’s struggling economy and the ongoing escalation of the Coronavirus remain challenging barriers to recovery. We anticipate that trade will continue to be an issue in 2020 as we monitor the impacts of the Coronavirus on the industry’s ability to re-open markets in China.



By Dana Lee Cole

While the trade situation with China took up the vast majority of the Board's time, other issues of note were briefly touched on, including the United States-Mexico-Canada Agreement (USMCA); Appropriations – especially regarding biomass, wood energy, and the implementation of the Farm Bill; and transportation. The Board also noted the impressive rise of the hardwood industry and Federation's profiles, both on Capitol Hill and in the media – highlighted by dozens of publications and television and radio hits including Fox Business, The Wall Street Journal, CNN, CNBC, NPR, and a multitude of regional and state outlets.

Election years are always wild, but presidential election years even more so, and we don't foresee 2020 being any different. It is going to be quite a ride through November 3rd and we will be focused and diligent on our issues from the get-go in the early part of the year. Congress will continue to hear from us why it is important that the right decisions are made when

considering reform measures in these areas, and why the wrong decisions can devastate our industry. The Hardwood Federation is very grateful for the tremendous support and engagement of the NWFA in the Federation. We very much look forward to working with your delegates to our boards, and to our continued cooperative engagements with NWFA CEO Michael Martin and his terrific team.

Individual and corporate support is vital to the efforts of the Hardwood Federation. If you would like to learn more about contributing to help us in our work on behalf of the industry in Washington D.C., visit hardwoodfederation.com or call 202.463.2705. ■

Dana Lee Cole is Executive Director at the Hardwood Federation, a Washington, D.C.-based hardwood industry trade association that represents thousands of hardwood businesses in every state in the United States and acts as the industry's advocacy voice on Capitol Hill. She can be reached at dana.cole@hardwoodfederation.com.

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INDUSTRY INSIGHTS

MARKET MATTERS 



The COVID-19 outbreak has generated a crisis mentality that is gripping much of the world and our client base, regardless of whether the mortality statistics support such a response. In our view, there are three ways to respond to a crisis: succumb to it, survive it, or leverage it to your advantage.

Descending interest rates are an early outcome – and opportunity – presented by COVID-19, as investors seek safety from the battered equities market by pouring into fixed-income securities. Ten-year Treasury yields closed February at 1.17 percent and have tumbled even lower in March, dropping to all-time lows before ticking up again as of this writing. This came in concert with successive emergency rate cuts by the Federal Reserve.

Demand for U.S. Treasuries is pushing bond prices up and yields down, making this an excellent time to leverage up and make purchases that will help you grow your business when the economic cycle

Conventional mortgage rates are closely associated with long-term bond yields, so Treasury yields' recent descent to record lows has naturally translated to declining mortgage rates as well. This is likely to bolster an already red-hot U.S. housing market heading into the peak season this spring.

By Connor Lokar



transitions back to rise. Costs are often lower at the bottom of the business cycle – not just for capital, but also for physical assets and capital equipment. Leveraging the uncertainty in this cycle may allow you to secure concessions from vendors or contractors that may have been inconceivable just 12 months ago, as well as finance your purchases at extraordinarily low rates.

Think about your bottlenecks – they could be plaguing you right now – or anything that held your business back during the last peak of the business cycle in late 2018. For some, mitigating these obstacles could mean supplementing an aging fleet of trucks or vans; for others it may be replacing aging, breakdown-prone capital assets, or even expanding physical office space to handle the rising head counts that will support expanding business.

There is also personal opportunity in this crisis, perhaps for yourself or your children. Conventional mortgage rates are closely associated with long-term bond yields,

so Treasury yields' recent descent to record lows has naturally translated to declining mortgage rates as well. This is likely to bolster an already red-hot U.S. housing market heading into the peak season this spring. Yes, some would-be buyers may react negatively to the fear and noise generated by COVID-19 and sit on the sidelines this spring, leaving more room for the bold to buy in an inventory-strapped market.

As in everything, there will be wins and losses. There will be some definite losses in the COVID-19 crisis – most significantly, the loss of life – but the crisis will present very real opportunities in 2020 as well. Fortune favors the bold. ■

Connor Lokar is a Program Economist at ITR Economics, where he provides economic consulting services for businesses, trade associations, and Fortune 500 companies across a spectrum of industries. To learn more about ITR Economics, visit itreconomics.com or reach the team at 603.796.2500 or customercare@itreconomics.com.

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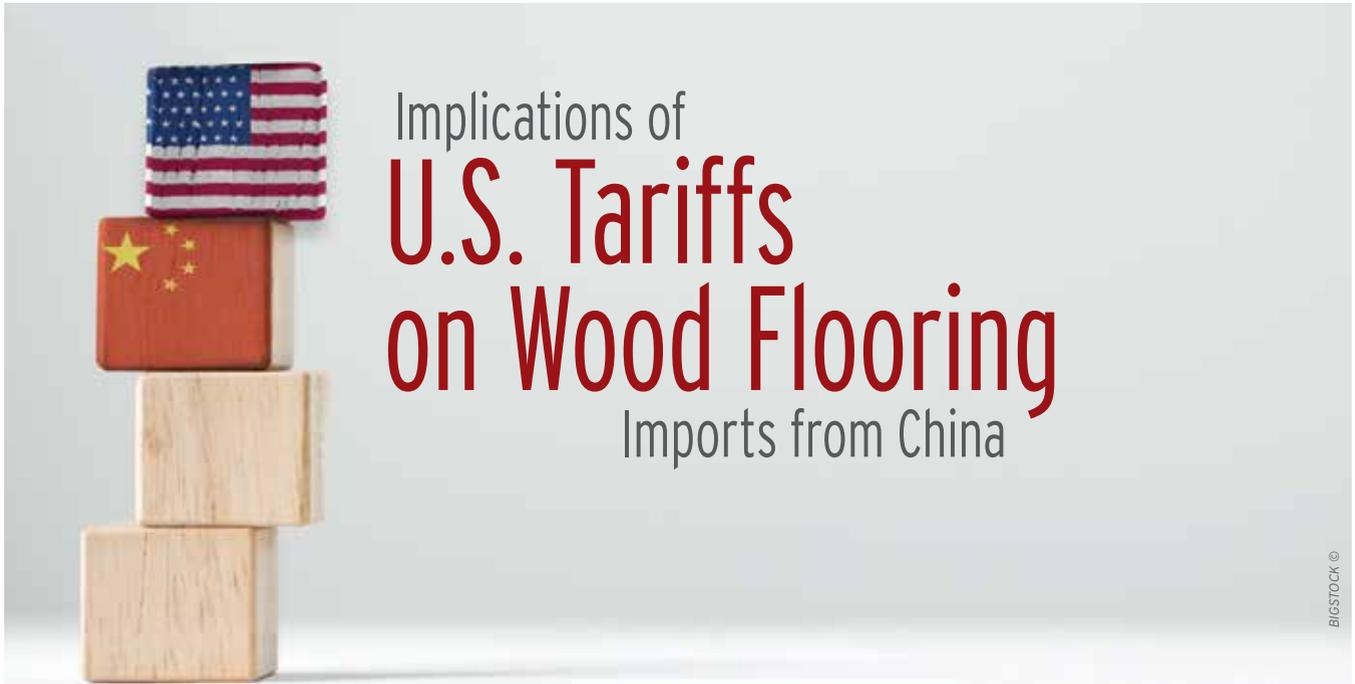
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To fully comprehend the current tariff situation with Chinese imports, one must first understand the recent history of U.S. trade relations with China. China has grown in the last three decades to become the second-largest economy in the world and the world's largest exporter of manufactured goods. China's economic growth was boosted significantly in 2001 when it was granted membership to the World Trade Organization (WTO). WTO membership conferred on China the status of a "Most Favored Nation."

This status provides the 165 WTO members (84 percent of the world's countries) several key advantages, including:

- Preferential trade benefit for member nations; also, all nations are treated equally with no special benefits for a single trading partner
- Lower trade barriers (lower tariffs, higher import quotas, etc.)
- Access to developed markets for under-developed countries
- A mechanism to resolve trade disputes
- Engaging in state-sponsored currency manipulation
- Product dumping and government subsidies for domestic producers
- Maintaining a state-led economy with regulatory support
- Limiting access to Chinese markets for foreign firms
- Extraction of foreign technologies
- Foreign investment restrictions
- Inadequate foreign intellectual property rights protection
- Bad faith trademark registration
- Widespread counterfeiting of foreign goods
- State-sponsored computer hacking

As part of China's WTO membership, they agreed to major changes in the way they conduct international trade. Since 2001, China has not markedly made any major changes to its trading practices. Over the years, the WTO and the U.S. have tried to move China closer to compliance, but China continues to delay and subvert efforts to drive them closer to the fair-trade practices they agreed to. China continues to flaunt WTO stipulations by:

After many years of China frustrating efforts to bring it closer to compliance and previous U.S. administrations largely ignoring Chinese infractions, the Trump



U.S. - China Total Trade

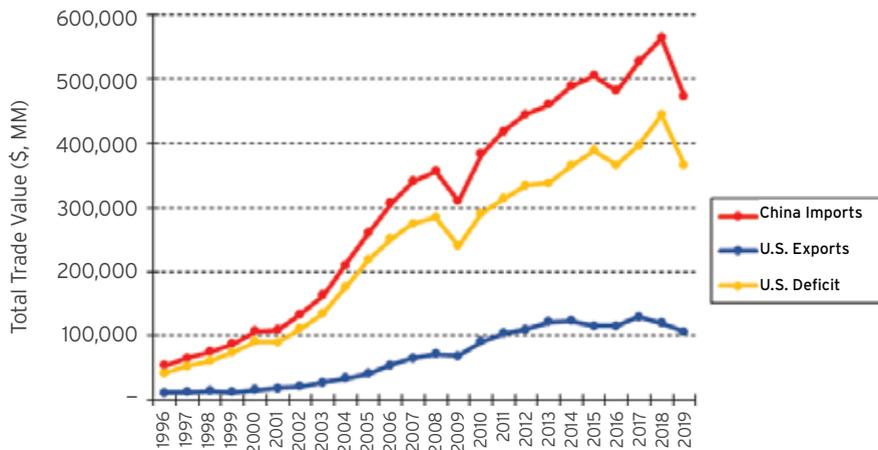


Figure 1 Source: U.S. International Trade Commission

administration has begun to force China into meeting its WTO obligations by applying tariffs to some of its key exports to the U.S.

On September 24, 2018, a 10 percent tariff was added to all existing tariffs previously in force for \$50 billion worth of mainly Chinese industrial goods imports (10 percent of total Chinese imports) to the U.S., and all flooring categories were included in the list of commodities to be so tariffed. On January 1, 2019, the 10 percent tariff was raised to 25 percent, and another \$200 billion worth of goods were added to the schedule of commodities to be tariffed (approximately 50 percent of total China imports to U.S.).

China then retaliated with tariffs on \$60 billion worth of U.S. exports to China (46 percent of total U.S. exports to China). China specifically included many agricultural imports from the U.S. to pressure U.S. farmers. Trade negotiations then were undertaken between the U.S. and China. However, as the U.S. felt insufficient progress was being made, it announced in September 2019 that a 25 percent tariff on the remaining approximately \$250 billion of Chinese imports would go into effect January 1, 2020.

Chinese total exports of goods to the U.S. have grown dramatically since its 2001 acceptance to the WTO, rising from \$102 billion in 2001 to \$506 billion in 2017. Conversely, U.S. total exports of goods to China during the

same period rose from \$19 billion to \$130 billion. The U.S. trade deficit with China has grown from \$83 billion in 2001 to \$376 billion last year. China's trade volume growth is similar for the European Union (EU) and many other nations as well.

Following China's entry into the WTO, total imports to the U.S. grew quickly (re: Figure 1).

In regards to these tariffs, flooring is part of a larger U.S. trade strategy to halt China's predatory trade practices. China has used its huge domestic market to force U.S. firms into joint ventures with Chinese or China state-run companies, and often the price to maintain their 49 percent stake is to transfer technology to their Chinese partners. Technology sharing is not a prevalent practice in flooring by China, but it is part of a larger scenario of the U.S. having billions of dollars of its technologies squeezed out of U.S. firms in other industries.

Tariff Impacts

The U.S. has imposed punitive tariffs to force China to move toward compliance. The tariffs are additive to general tariffs already in place. For example, given Chinese wood flooring's general tariff rate of 3.2 percent, the 10 percent tariff would make the new U.S. tariff on Chinese wood flooring 13.2 percent.

The cost advantages for Chinese- versus U.S.-produced wood flooring discussed in **Figure 2** refers to the general price of Chinese wood flooring landed in the U.S. compared to U.S.-produced wood flooring. Assuming no anti-dumping tariffs, recent U.S. punitive tariffs have turned China's general production advantage of 25 percent into a 3.2 percent disadvantage versus U.S.-produced wood flooring (**re: Figure 2**).

Only a few Chinese firms have escaped anti-dumping duty sanctions levied in December 2010. About 100 firms were found guilty of dumping, and a punitive duty rate was imposed that varied by firm. The few companies that escaped the anti-dumping duty comprise most of the exports of engineered wood flooring from China to the U.S. The analysis in **(Figure 2)** covers only firms exonerated from the anti-dumping duties. Some of the firms that were found to be dumping wood flooring by the U.S. International Trade Commission (USITC) moved their operations to Vietnam and Cambodia. Vietnam and Cambodia are believed to hold an additional cost advantage of +7.5 percent, lower labor costs, but slightly higher shipping expenses, over China. Vietnam and Cambodia thus have a 32.5 percent cost advantage over the U.S. in wood flooring production.

Despite the ups and downs of the U.S. wood flooring market, China's share of

Chinese versus U.S. Produced Wood Flooring Landed Cost Analysis

	Notes*	Rate	Calculation
Net Chinese Manufacturing Advantage vs. U.S. Product	(*1/)	25.0%	(A)
(-) General U.S. Tariff Rate		3.2%	(T1)
(-) Punitive Tariff Rate @ 9/24/18		10.0%	(T2)
(-) Punitive Tariff Rate @ 5/10/19 (25%)	(*2/)	15.0%	(T3)
(=) Net Landed Advantage for Chinese Wood Flooring	(*3/)	-3.2%	(A)-(T1)-(T2)-(T3)

*Key to Notes:

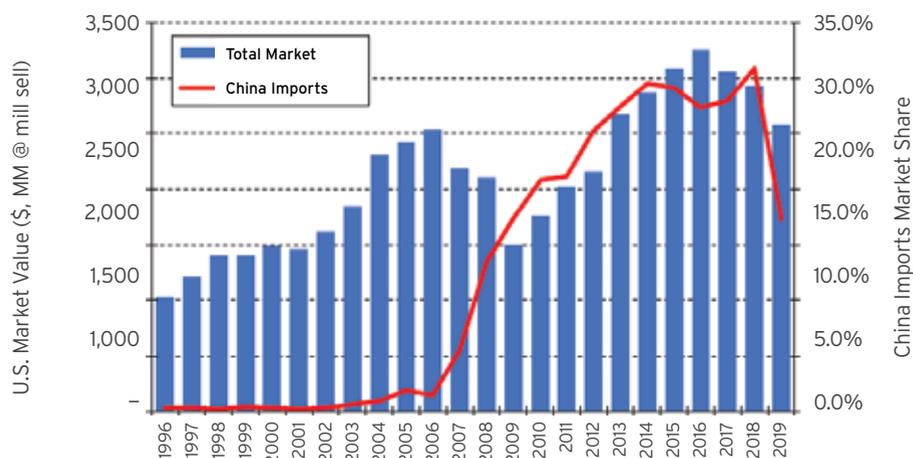
- (1/) = Net Chinese manufacturing advantage over U.S.-produced product is the estimated net advantage that Chinese product possesses due to lower costs for raw material, labor, and other costs, lower margin rates, and Chinese tax incentives for exported (engineered) wood flooring, netted against shipping and carrying costs from China to the U.S.
- (2/) = Punitive tariff rate of 25% shown raises the former 10% rate to the 25% level, thus the new rate is +15%.
- (3/) = A positive figure indicates net percent advantage for Chinese-produced wood flooring and a negative figure indicates a net percent disadvantage for Chinese-produced wood flooring.

NOTE: Above figures do not include any anti-dumping tariffs.

Source: Market Insights LLC, U.S. International Trade Commission

Figure 2

U.S. Wood Flooring Market Value



NOTE: China Imports Market Share = % of Market \$

Source: Market Insights LLC, U.S. International Trade Commission

Figure 3

annual U.S. wood flooring consumption value has grown steadily from 5.6 percent of the total market dollar sales in 2007 to 30.5 percent in 2018. In 2019, under the competitive pressures of Luxury Vinyl Tile (LVT) and tariffs on Chinese wood flooring imports, China's share of the U.S. wood flooring market fell to 16.9 percent. During the same same period (2007 through 2019), wood flooring imports' share of the total U.S. wood flooring market grew from 14 percent to 53 percent, before falling to 44 percent in 2019.

The decline in total wood flooring imports' share of the U.S. wood flooring market indicates both a loss of the low-priced end of the wood flooring market to LVT, and an increased reliance on U.S.-produced product (**re: Figure 3**). Anti-dumping duties imposed on Chinese engineered wood flooring firms are not included in the analysis shown in **Figure 3**.

The decline in wood flooring imports from China has been a boon for product from Canada, Vietnam, and Cambodia (re: **Figure 4**). While some plants in Vietnam and Cambodia were previously in-place prior to the current tariff situation, Chinese firms also have established new or moved existing plants to Vietnam and Cambodia. In any case, it is unlikely that these facilities have sufficient capacity to fill U.S. market needs or to replace China's nearly \$1 billion in U.S. imports of wood flooring annually.

Conclusions

To be sure, the second wave of tariffs on Chinese-made wood flooring imported to the U.S. has had a significant effect on the penetration of these products in the U.S. market. Additionally, the U.S. International Trade Commission (USITC) is conducting an investigation of Chinese wood flooring firms regarding potential dumping violations and other onerous trade practices. This may create more, significantly greater, punitive tariff rates on wood flooring imported from China. In August 2019, the USITC imposed an anti-dumping duty of 82.13 percent on engineered wood flooring produced by 46 Chinese wood flooring producers and a separate rate of 42.57 percent for 59 other Chinese engineered wood flooring firms on all their engineered wood flooring shipped to the U.S.

The effect of the original 10 percent punitive tariff was absorbed largely by Chinese wood flooring producers and exporters so that the impact in the U.S. market was negligible for U.S. distributors, retailers, and consumers.

U.S. Wood Flooring Imports by Country of Origin

Country of Origin	Annual Import Values (U.S.\$, MM @ C.I.F.)				% of U.S. Market	
	2016	2017	2018	2019	2018	2019
China	889	856	907	446	31%	17%
Canada	126	128	136	146	5%	6%
Vietnam	34	68	106	136	4%	5%
Cambodia	13	79	94	101	3%	4%
Indonesia	49	60	63	59	2%	2%
Brazil	49	32	39	45	1%	2%
All Others	209	201	205	204	7%	8%
Total Imports-	1,370	1,422	1,549	1,138	53%	44%
% Change	—	3.8%	8.9%	-26.5%		
Total U.S. Market	3,249	3,057	2,933	2,581	100%	100%
% Change	—	5.9%	4.1%	-12.0%		

Figure 4

NOTE: Total U.S. market dollar figures expressed in millions of US\$ at mill sell
Source: Market Insights LLC, U.S. International Trade Commission

Conversely, the stage-2 punitive tariff of 25 percent was too large to be absorbed fully by Chinese producers and exporters. It is estimated that 15 points of the 25 percent punitive duty was passed on to U.S. customers.

On November 8, 2019, the USITC granted an exclusion from the recent tariffs for select types of Luxury Vinyl Tile (LVT). Certain types of rigid LVT were excluded from the punitive 25 percent tariff given that it was found that not enough capacity to supply the demands of this product exists around the world. This action by the USITC will allow rigid LVT to continue to be sold in the U.S. without the encumbrance of punitive duties, providing it with a greater price advantage. This exclusion increasingly will be less important as U.S. domestic rigid LVT production facilities come on-line later this year and next year.

On January 15, 2020 the U.S. and China signed a tentative trade deal that acts as a cease-fire in the two-year trade war between the two nations. However, this agreement leaves in place U.S. tariffs on about \$370 billion of total Chinese imports to the U.S., or about 75 percent of all China shipments to the U.S. This

agreement does not cover any flooring products shipped between the U.S. and China.

Wood flooring tariffs on imports from China of largely engineered wood flooring will never be as significant a threat to U.S. wood flooring producers as challenges presented by competitive flooring products (LVT, carpet, etc.) and U.S. retailers increasing their own store brands.

Two solutions to this dilemma are for wood flooring producer brands to enhance promotion of their products as a value proposition, just as Lexus and BMW automobiles are valued as desirable luxury brands in the auto business. A second solution is to find ways to produce less costly wood flooring products and move the category down market into lower-priced segments. This can be done by using alternative constructions and/or employing less-expensive species, such as red pine. In the end, producers will need to determine the best path for their firms. ■

Santo Torcivia is President of Market Insights LLC in Reading, Pennsylvania. He can be reached at 610.927.2299 or storcivia@marketinsightsllc.com.

INDUSTRY INSIGHTS

DESIGNER INSIGHTS 



TOP 5 TRENDS FOR 2020 and the new decade

The roaring twenties are here and that brings not only a whole host of new ideas and new design trends, it also brings the much-needed look back at how trends have evolved over time. Looking back is important because it reveals the patterns that occur over the course of time and helps trend forecasters and design experts discern what's ahead.

TREND REVIEW

Back in the 90s, one of my friends led the creation of the “color through the centuries” palette for a major corporation known for their color trend forecasting. That particular palette proved to be a valuable timeline to follow how paint color trends shifted, from warm neutrals to cool neutrals, or from pinks and grays to “peas, corn,

and carrots” and the reasons why those changes took place. The patterns in how the colors shifted each decade are still pretty accurate and applicable today.

The first decade of the 2000s was full of seismic shifts in the market, the economy, and in consumers’ behaviors. At that time, my focus was primarily on the color, style, and design development on the soft surface side. I spent weeks



By Emily Morrow Finkell

traveling up and down the epicenter of where trends initiate, from southern California to the Pacific Northwest. It was there, in that light, in those designer resource rooms and retailer showrooms that I saw the problem. Dated color lines appeared stale in a showroom where hard surfaces had become such an important material.

It was apparent that hard surface materials needed to merge seamlessly across the transitions, or else sight lines would be disrupted with an “off-putting” change in coloration.

Thus began the shift to coordinating carpet and hard surfaces. The result of this shift was a more design-focused approach to product development. Consumers shopping for flooring could now more easily find colorations that simply fell into place during their selection process. These colors are what I classified as “Commitment Colors,” meaning colors that



PHOTO COURTESY OF NWFA

There's no room for faux materials in this new decade. We are now entering into the wonderful world of “natural fibers, natural materials,” as well as premium finishes and installation methods.



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aren't easily changed out, but are "installed." Examples are counter tops, cabinets, hardwood flooring, and natural stone or tile.

In the design world, there are "commitments" like these finishes, which have a shelf life of up to 10 years. The remaining colors we see are "fashion colors," present in accessories or smaller items that can be changed out quickly and affordably. These are things like artwork, rugs, pillows, drawer pulls, light fixtures, and upholstery. Changing out the "fashion colors" helps bridge the gap and make a dated interior appear more modern.

PREDICTING FUTURE PREFERENCES

Newton's law of inertia states that an object at rest stays at rest, while an object in motion stays in motion unless acted upon by an unbalanced external force. Consumers' preferences are like a massive object that will not move until an external force causes it to move. The forces that can cause a change typically are major ones – a failing economy, or a change in the political climate of a nation. The housing market bubble and recession that, starting in 2006 and 2007, led to preferences that became super-safe, like navy blue. Gray also entered the scene during this time frame and hasn't left us yet, although there are murmurs in parts of the U.S. that some consumers are looking beyond gray. However, it's important to note there are parts of the country that are just now installing gray items. While some will be slow to adapt, what are some of the more seismic shifts that I predict for the decade ahead?

A growing number of consumers are weary of the "fake" plastic feeling of wood look-alike flooring. Many of these consumers are "millennials" who recognize quality and aren't shy about asking questions. Surveys and research indicate millennials want to own homes, they aren't willing to trade down in quality, and appreciate "natural" premium materials. If you educate them in a non-condescending way, you'll earn their business in the decade to come. ■

Emily Morrow Finkell is an interior designer and CEO of EF Floors & Design LLC in Dalton, Georgia, a provider of hardwood floors and home furnishings, and an NWEA design contributor. She can be reached at emily@emilymorrowhome.com.

LOOKING AHEAD

Go for the gold. We will be seeing both metallic gold and the color gold in the new decade.

Neutral and timeless walls. Wall colors are going to stay either "White Heron" BM OC-57 or "Thunder" gray BM AF-685 for a bit longer, but the fashion colors we'll see added to spaces will include timeless combinations of "navy blue and white." Also expect the gradual emergence of the buttery "Golden Straw" BM 2152-50 or other warm colors such as the pinkish "First Light" BM 2102-70, Benjamin Moore's 2020 Color of the Year.

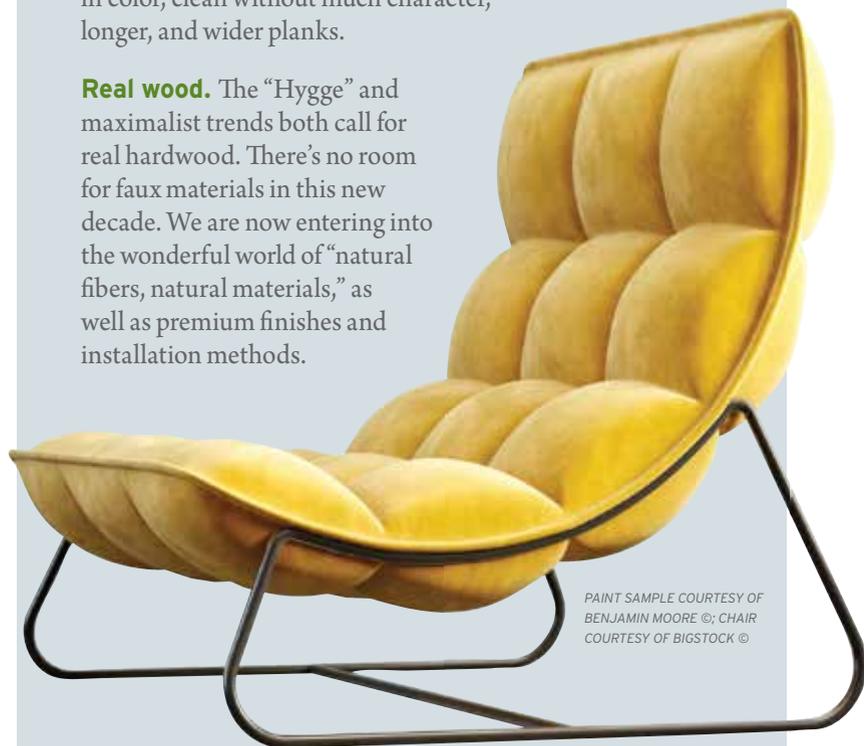
Light is a key theme. Lightness in color is essential for the transition of new trends, as it helps make shifts easier to manage for all interiors. Think back to my previous color forecast, which included "Sea Salt," "French Limestone," and the "Hygge" movement (a Scandinavian term for making things calm and eliminating clutter) starting back in 2016. We can expect to see more of these light and airy trends for quite some time.

Maximalism. There always will be an opposite reaction in the market place, which brings me to "everything and the kitchen sink." The clash of colors and design styles require there to be an element that allows for so much variety. That one element is hardwood flooring, especially light in color, clean without much character, longer, and wider planks.

Real wood. The "Hygge" and maximalist trends both call for real hardwood. There's no room for faux materials in this new decade. We are now entering into the wonderful world of "natural fibers, natural materials," as well as premium finishes and installation methods.



Benjamin Moore's
2020 Color of the
Year "First Light"
BM 2102-70.



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BUSINESS BEST PRACTICES

COVID-19 RESOURCES 



The U.S. Senate passed and President Trump signed the Families First Coronavirus Response Act on March 18, 2020. This Act is an economic stimulus plan aimed at addressing the impact of the COVID-19 outbreak on Americans and introducing paid sick leave and an expanded family and medical leave act to the nation's employers. The leave provisions became effective on April 2, 2020 and will remain in effect until December 31, 2020.

This Act includes many provisions that apply to employers, such as paid sick leave for employees impacted by COVID-19 and those serving as caregivers for individuals with COVID-19. While the Act also contains several provisions to increase funding for familiar benefit programs, like WIC and SNAP, this article summarizes two of the key benefit provisions that affect employers: The Emergency Family and Medical Leave Expansion Act and the Emergency Paid Sick Leave Act.

EMERGENCY FAMILY AND MEDICAL LEAVE EXPANSION ACT ("FMLA")

Expanded Coverage and Eligibility

The Act significantly amends and expands FMLA on a temporary basis. The current employee threshold for FMLA

coverage would change from only covering employers with 50 or more employees to instead covering those employers with fewer than 500 employees. It also lowers the eligibility requirement, allowing any employee who has worked for the employer for at least 30 days prior to the designated leave to be eligible to receive paid family and medical leave. As a result, thousands of employers not previously subject to the FMLA may be required to provide job-protected leave to employees for a coronavirus-designated reason.

The Secretary of Labor excludes healthcare providers and emergency responders from the definition of employees who are allowed to take such leave. Small businesses with fewer than 50 employees also are exempt if the required leave would jeopardize the viability of their business.



Reasons for Emergency Leave

Any individual employed by the employer for at least 30 days may take up to 12 weeks of job-protected leave to allow an employee, who is unable to work or telework, to care for the employee's child, under 18 years of age, if the child's school or place of care is closed or the childcare provider is unavailable due to a public health emergency. This is now the only qualifying need for Emergency FMLA and a significant change from the prior version of the bill passed by the House earlier, which contained several other COVID-19-related reasons to provide Emergency FMLA.

Paid Leave

Another big change from the prior version passed from the House is the reduction of the unpaid period of Emergency FMLA. Now, the first 10 days, rather than 14 days, of Emergency FMLA may be unpaid. During this 10-day period, an employee may elect to substitute any accrued PTO, sick, or vacation leave to cover some or all of the 10-day unpaid period. After the 10-day period, the employer generally must pay full-time employees at two-thirds the employee's regular rate for the number of hours the employee would otherwise normally be scheduled. The new Act now limits this pay entitlement to \$200 per day and \$10,000 in the aggregate per employee.

Calculating Pay for Non-Full Time Employees

Employees who work a part-time or irregular schedule are entitled to be paid based on the average number of hours the employee worked for the six months prior to taking Emergency FMLA. Employees who have worked for less than six months prior to leave are entitled to the employee's reasonable expectation at hiring of the average number of hours the employee normally would be scheduled to work.

Job Restoration

Employers with 25 or more employees will have the same obligation as under traditional FMLA to return any employee who has taken Emergency

INSIGHT ON THE CARES ACT

As part of the federal economic response to the COVID-19 crisis, President Trump signed into law the Coronavirus Aid, Relief, and Economic Security Act (CARES Act). The CARES Act provides relief for individuals, businesses, governments, the health care system, and distressed industries. This legislation is vast, complex, and evolving through enactment, but we are working constantly to be a resource in this time of need to provide clear and concise guidance.

Key tax changes in the bill:

- Expanded unemployment insurance
- \$350 billion allocated to help small businesses
- Recovery rebate for individuals
- Early withdrawal penalty on retirement account distributions waived
- Certain employer student loan payments excluded from taxable income
- Business provisions like a refundable payroll tax credit and net operating loss carry backs
- Defers employers' obligations to pay their portion of the social security payroll tax, which includes the self-employed

SBA SMALL BUSINESS RELIEF LOANS (CARES ACT)

Plan to take advantage of stimulus loans – they will be underwritten, processed, and funded by banks and approved lenders. Depending on final distribution of the facts in the bill, there may be some question around eligibility if you've already received previous disaster assistance directly through the SBA.

Other Items to Keep in Mind

- Keep in communication with your banker; part of this act will include loan deferrals, which may potentially take up to six months.
- The tax filing and payment deadlines have been extended to July 15.

Please keep in mind that due to the quickly-changing nature of the COVID-19 pandemic, you should always discuss changes with your advisor, banker, or legal counsel. For more information from Anders CPAs + Advisors, visit anderscpa.com/covid-19-resource-center/.



Check out the NWFAs COVID-19 Resource Center for wood flooring professionals at hardwoodfloorsmag.com.

Covid-19 Resources *(Continued)*

FMLA to the same or equivalent position upon the return to work. However, employers with fewer than 25 employees generally are excluded from this requirement if the employee's position no longer exists following the Emergency FMLA leave due to an economic downturn or other circumstances caused by a public health emergency during the period of Emergency FMLA. This exclusion is subject to the employer making reasonable attempts to return the employee to an equivalent position and requires an employer to make efforts to return the employee to work for up to a year following the employee's leave.

EMERGENCY PAID SICK LEAVE ACT

Reasons for Paid Sick Leave

This Act allows an eligible employee to take paid sick leave because the employee is:

1. Subject to a federal, state, or local quarantine or isolation order related to COVID-19.
2. Advised by a health care provider to self-quarantine due to COVID-19 concerns.
3. Experiencing COVID-19 symptoms and seeking medical diagnosis.
4. Caring for an individual subject to a federal, state, or local quarantine or isolation order or advised by a health care provider to self-quarantine due to COVID-19 concerns.
5. Caring for the employee's child if the child's school or place of care is closed or the child's care provider is unavailable due to public health emergency.
6. Experiencing any other substantially similar condition specified by the Secretary of Health and Human Services in consultation with the Secretary of the Treasury and the Secretary of Labor.

Eligibility

This provision requires employers with fewer than 500 employees to provide full-time employees, regardless of the

employee's duration of employment, with 80 hours of paid sick leave at the employee's regular rate, or two-thirds the employee's regular rate to care for qualifying reasons 4, 5, or 6 listed earlier. An important change to this section provides an exception for employers that are healthcare providers or emergency responders at their election.

Cap on Paid Sick Leave Wages

The Act also places limits on paid sick leave. Paid sick leave wages are limited to \$511 per day up to \$5,110 total per employee for their own use and to \$200 per day up to \$2,000 total to care for others and any other substantially similar condition.

Carryover and Interaction with Other Paid Leave

This paid sick leave will not carry over to the following year and may be in addition to any paid sick leave currently provided by employers.

Calculating Rate of Pay

Employees who work a part-time or irregular schedule are entitled to be paid based on the average number of hours the employee worked for the six months prior to taking paid sick leave. Employees who have worked for less than six months prior to leave are entitled to the average number of hours the employee normally would be scheduled to work over a two-week period. A business employing fewer than 500 employees is required, at the request of the employee, to pay a full-time employee for 80 hours of mandated emergency paid sick leave instead of the initial 10 days of unpaid leave permitted by the Emergency FMLA, summarized above.

Legislation around COVID-19 is evolving continuously at a rapid rate. Visit Congress.gov to read the full Families First Coronavirus Response Act bill. ■

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real wood
Real Life

In 1824, a deputy surveyor named Charles Drury, used this beautiful majestic white oak tree in southern Arkansas as a “witness tree”. It was just 14 inches in diameter at the time. Today, at well over 200 years old and 48 inches in diameter, this historical Original Bearing Tree, which is a link to the beginning of the surveys of the Louisiana Purchase, is a great reminder of why we are so passionate about this natural renewable resource and about manufacturing solid wood flooring. There is no other building material on earth that is more environmentally friendly, durable, safer for your family, and economically sound than wood. Because of its beauty, strength, value, and performance, real wood flooring is highly sought after. Many products may mimic the look of real wood flooring, but none can come close to offering the benefits of a real wood floor.

When you are looking for floors that will last through the generations, promote healthy living, and add value to your home along with timeless beauty, choose a floor made from one of the most renewable resources in nature...

Choose real wood floors.



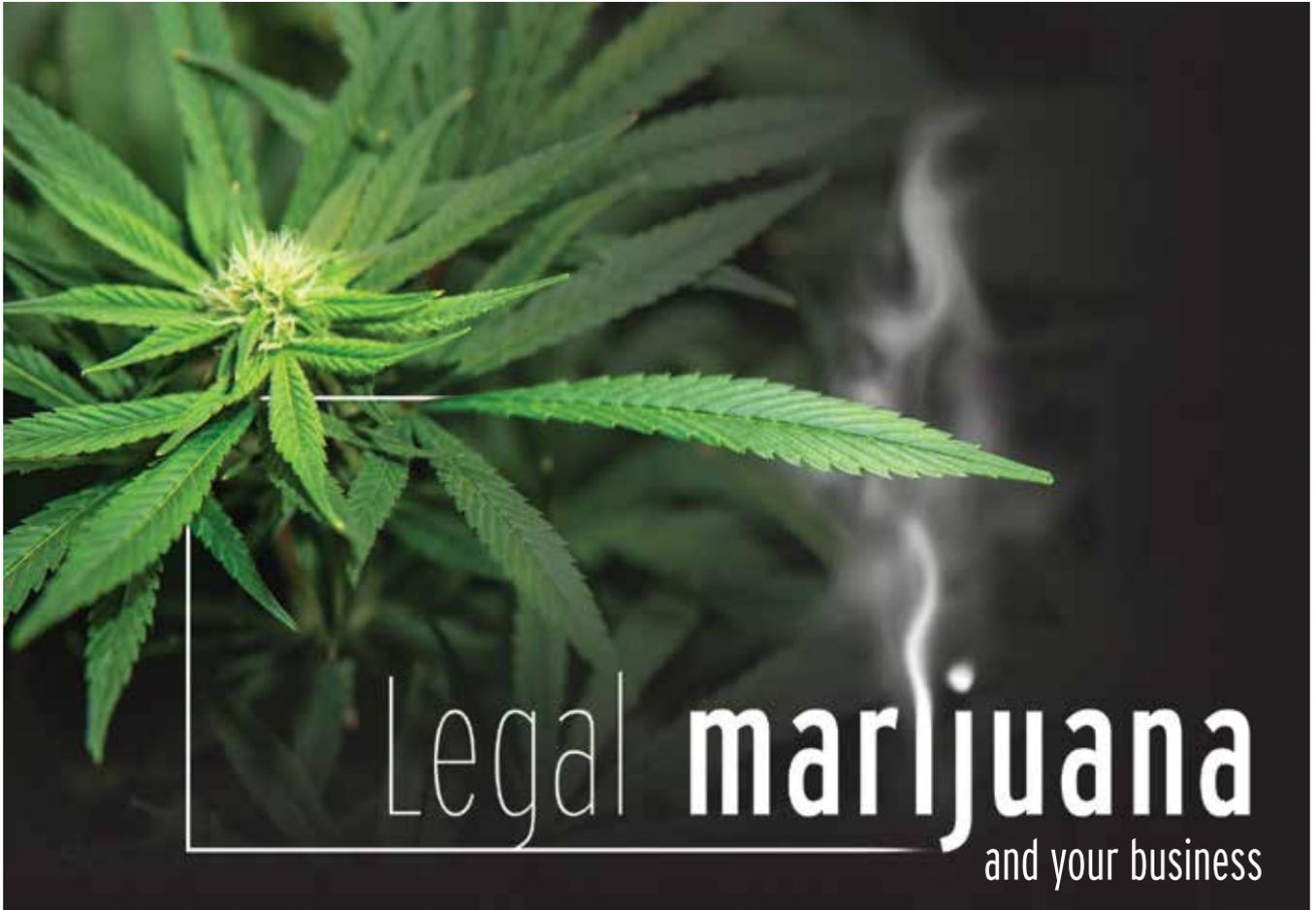
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BUSINESS BEST PRACTICES

LEGAL 



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Employers across the nation have watched as more and more states have legalized the use of marijuana for medical and/or recreational purposes. In fact, as of January 1, 2020, 11 states plus the District of Columbia have passed laws allowing for the recreational use of marijuana¹; 33 states now permit the medical use of marijuana in some fashion², and approximately 26 states have decriminalized the possession of marijuana in small amounts.

These new laws, coupled with the erosion of the stigma associated with the use of marijuana and the low unemployment rate, have forced employers to reconsider whether to test for marijuana at all, what to do when an applicant or employee tests positive, and what to do when a background check reveals a conviction for possession of marijuana.

These issues are especially tricky for employers in industries with operations in multiple states (who are subject to a different law in each state where they do business). Following are some of the issues and general considerations employers face when considering whether to test and what to do.

Are there any general rules applicable to testing for marijuana?

Under federal law, marijuana remains illegal and is classified as a Schedule I drug under the Controlled Substances Act (CSA). As such, each of the state marijuana laws allows employers to comply with federal laws and regulations, such as the U.S. Department of Transportation's regulations pertaining to safety-sensitive transportation employees. In addition, and unrelated to federal law, each of the state laws currently allow employers to prohibit employees from working under the influence of marijuana and from possessing marijuana in the workplace.

By Barbara F. Dunn & Norma Zeitler



Should employers test for marijuana?

When deciding whether to conduct pre-employment or random tests for marijuana, it is important to understand that unlike testing for alcohol impairment, there currently is no reliable way to determine whether an applicant or employee is impaired by marijuana. Instead, drug tests currently screen for the presence or absence of tetrahydrocannabinol (THC) metabolites.

Various factors affect how long these THC metabolites remain detectable, including, for example, frequency of use, the potency of product used, and the individual's metabolic rate. Consequently, a positive test result merely does not indicate current impairment – instead it means only that the applicant or employee has used a product containing THC at some point in time.

Thus, when deciding whether to test for marijuana, employers should consider factors such as the company culture, the industry they are in, whether they have employees in safety sensitive positions, the impact of legalization on the ability to recruit and retain workers, and a host of other factors.

Can an employer still test for marijuana?

Yes, but state law may limit the circumstances under which an employer can make an employment decision based on positive test results. For example, effective January 1, 2020, Nevada became the first state to prohibit an employer (with limited exceptions) from denying an applicant employment because of the presence of marijuana in a drug test. In addition, other state marijuana laws require employer drug policies to be “reasonable,” without any explanation as to what that means, and some require employers to afford employees the opportunity to challenge positive test results.

In addition to the marijuana laws, when some states legalized marijuana, they also passed (or amended) laws that prohibit employers from taking disciplinary action against applicants or employees for the use of lawful products off duty. Initially, courts sided with employers in these lawsuits – based on the theory that even though the use of marijuana is lawful under the particular state law, it remains illegal under federal law and is thus not a lawful product. However, a few courts are



beginning to find that off-duty use is protected under various formulations of the state marijuana laws or lawful use of products law in that state.

Given this uncertainty, it is important to understand applicable state laws before basing an employment decision on a positive marijuana test, and fully understand what is permitted (or required) under applicable state law before taking action.

Can an employer refuse employment based on a marijuana conviction?

Maybe. As an initial matter, many states have decriminalized possession of marijuana in small amounts, and at least one state (Illinois) has provided for the expungement of certain marijuana-related convictions. To date, these laws do not overtly prohibit basing employment decisions on conviction information that was obtained lawfully.

However, the U.S. Equal Employment Opportunity Commission (EEOC) has taken the position that background checks tend to screen out African-Americans and Hispanics in higher numbers than whites (this was one of the premises behind Illinois' expungement efforts).

Consequently, when determining whether to screen applicants out based on a conviction for a marijuana-related offense, an employer should review any applicable state laws carefully and be prepared to prove that the use of such test is job-related and consistent with business necessity.

Are there any differences between protections for recreational use and medical use?

Under federal law, no. Because marijuana remains illegal under federal law, medical use of marijuana is not protected by the Americans with Disabilities Act (ADA), which specifically excludes current use of illegal drugs, including marijuana.

Under state law, yes. Some of the state laws that permit medical use of marijuana afford certain protections to medical marijuana users that are not afforded to recreational users. In addition, in states that have state laws similar to the ADA, some statutes require, and a growing number of courts are finding, that employers must consider whether it would be a reasonable accommodation

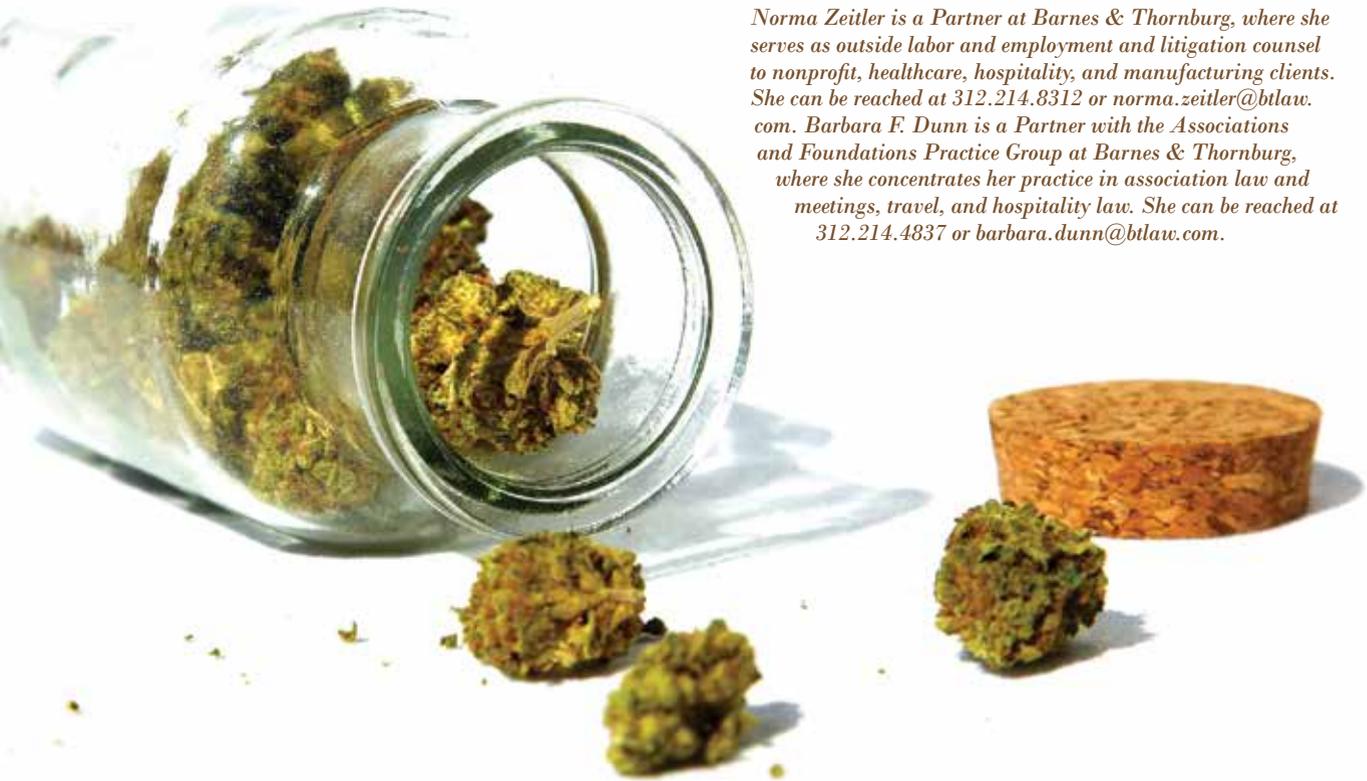
to excuse a positive test result for marijuana that resulted potentially from off-duty medical marijuana use that is legal under that state's law.

Thus, in states that permit the medical use of marijuana, employers often are deciding that the safest approach to dealing with medical marijuana users is to avoid basing employment decisions on positive test results unless the user is in a safety-sensitive position or in a position that is regulated by federal law.

What actions can employers take now to protect their companies?

Review your drug testing policies to see what they prohibit; review current state law to determine what is permitted; monitor state law changes in the states where you operate; decide whether you want to include marijuana in any pre-employment or random drug tests; update any applicable policies to comply with state law; consider whether you need a policy on possession of marijuana in the workplace if you do not have one. And, if you are unsure about what to do, consult with experienced employment legal counsel. ■

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SOURCES: ¹ These states include Alaska, California, Colorado, Illinois, Maine, Massachusetts, Michigan, Nevada, Oregon, Washington, and Vermont.

² These states include Alaska, Arizona, Arkansas, California, Colorado, Connecticut, Delaware, Florida, Hawaii, Illinois, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Missouri, Montana, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, Utah, Vermont, Washington, and West Virginia.

IMPROVING FOREST SUSTAINABILITY FOR FUTURE GENERATIONS



The NWFA's Responsible Procurement Program (RPP)

is a joint initiative between environmental groups and manufacturers committed to producing and promoting wood floors that come only from environmentally responsible sources.

The program is unique from ALL other certification programs in that it encompasses ALL manufacturers' raw materials.

RPP products are recognized by several residential green building programs, including:

- NAHB's National Green Building Standard – more than 100,000 dwelling units certified
- Earth Advantage – more than 27,000 dwelling units certified
- Build It Green – more than 20,000 homes certified
- Collaborative for High-Performance Schools – more than 200 schools certified



NWFA's Responsible Procurement Program would like to welcome



NWFA member companies certified under RPP

Anderson Tuftex

Mannington

Mohawk

Mullican Flooring

Shaw Hardwoods

Sheoga Hardwood Flooring & Paneling

To learn more about the RPP Program, visit nwfa.org/manufacturing.



BUSINESS BEST PRACTICES

FINANCES 

The Importance of **Cash Flow** MANAGEMENT



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When it comes to the financial management of any business, it is often said that "cash is king." Whether your business is struggling or growing, effectively managing your cash flow is essential. The Small Business Administration estimates 600,000 new small businesses launch each year; however, only about two-thirds will survive two years. Less than half of those businesses will survive for four years. One of the main reasons for their failure is insufficient cash flow.

As a business owner, you probably wear many hats: administration, human resources, marketing, sales, finance, and anything else necessary to ensure your business's success. Of all these functions, it is often the accounting and finance area that receives the least attention. However, for your business to achieve success, you need a clear vision of how decisions affect your company's finances. If you don't take control of your cash, it will take control of you.

You can't just look at your profit and loss statement to determine cash flow. Earning a profit is not the same thing as knowing what happened to your cash. Without cash, profits are meaningless. A profitable business on paper still can lead to bankruptcy if the amount of money coming in doesn't compare to the amount of cash going out. Other financial figures contribute to determining cash flow,

including accounts receivable, accounts payable, inventory, capital expenditures, and taxes. Effective cash flow management requires that you focus on these drivers of cash in addition to your profit and loss.

If you have spent a lot of your working capital, you may come up against a cash shortage that prevents you from buying materials, paying suppliers, or maybe even salaries. That is why it is critical to maintain a level of working capital that allows you to make it through those crucial times and continue operating your business.

The delay between the time you have to pay suppliers and the time you receive payment from customers is the problem, and the solution is cash flow management. Simply put, cash flow management means delaying outlays of cash as long as possible while encouraging your customers to pay as quickly as possible.



By Dana Rogers

Although every business is unique, there are some cash flow management problems common to most small businesses. These include:

1. **Not keeping enough cash reserves.** You should have at least three to six months of working capital set aside for unexpected demands on your cash flow.
2. **Not having a cash flow business plan.** There should be a plan in place that includes ways to handle a gap between your outgoing and incoming cash flow.
3. **Not tracking your small business cash flow projection accurately.** It is crucial to monitor your incoming and outgoing cash flows at least once a month, but possibly even weekly or daily.
4. **Not correctly pricing your product or service.** If you charge too much, you may scare off potential customers. But if you charge too little, not only will your incoming cash be lower, the perceived value of your product or service by your customers could be lower, potentially leading to less business overall.

There are several ways a business can improve its money management skills and, in turn, improve its cash flow, including:

1. **Know the point at which your business will break even.** While this won't necessarily impact your cash flow, it will give you a goal to strive for and a target for forecasting where your cash should be budgeted and spent.
2. **Manage your funds better.** Unless you have no other choice, you shouldn't handle the money for your business, including your accounting. Hire an accountant, or if you can't afford it, designate a trusted employee to be your cash flow monitor. There are numerous accounting software

spreadsheets and programs available that make preparing cash flow projections and tracking your cash flow more straightforward, some of which are low cost or even free. And, remember that you obtain your cash balance from your accounting system and not from your bank account. Your bank will not show checks that have been written but not cleared, nor will it show deposits in transit. When you are able, consider opening an interest-earning business savings account and establishing a business line of credit for emergencies.

3. **Invoice and collect from your customers on a timely basis.** The quicker you send invoices out, the faster the cash comes in. Invoice immediately on completion of the work or delivery of the product. Design invoices so they are straightforward and easy to read and consider emailing instead of mailing them. Follow up with payment reminders. If possible, offer customers an incentive, such as a small discount, if they pay their invoice early. Have a late payment penalty in place for customers who exceed the due date.
4. **Spread out your expenses.** Unless there is a good reason for you to pay early, figure out how late you can pay your vendors without risking a late fee or otherwise harming your relationship with them. Take advantage of credit cards geared toward businesses that offer rewards or cashback, while also providing extra float time on when the cash leaves your bank account. Your cash forecast should show what necessary expenses are coming up, so make sure that outside of essential purchases, you minimize spending and eliminate costs that aren't required to your business until you are profitable.

Managing cash flow in the best way possible is critical to ensuring that you can focus on and grow your business. By taking the necessary steps to ensure that your business is ready for unexpected ups and downs, you will be confident that you have the skills and cash on hand to take care of it and get back to business. ■

Dana Rogers is Controller for the National Wood Flooring Association in St. Louis. She can be reached at dana.rogers@nuwfa.org or 800.422.4556.



When it comes to the financial management of any business, it is often said that "cash is king."

BUSINESS BEST PRACTICES

SALES SAVVY 



ARE YOU CREATING ENOUGH PERSONAL VALUE?

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According to a recent study in the *Harvard Business Review*, only 12 percent of salespeople are rated as “excellent” by buyers. That percentage is shockingly low. So, if your benchmark is excellence, there is an 88 percent chance you can improve.

Our world is becoming increasingly commoditized. Products and services are viewed as similar or exactly the same. With merger-mania, corporations blend in and look the same. However, the salesperson remains the unique dimension for creating value.

In our best-sales-practices study, we identified 10 characteristics of top-achieving salespeople. We interviewed more than 600 customers to identify these characteristics. In our latest edition of *Value-Added Selling*, we provide an in-depth analysis of top-achievers and how they create personal value. Here is an abbreviated list to help you create more personal value like a top achiever.

KNOWLEDGEABLE



Do you study your opportunities? Do you study your craft? Do you study the industries in which you sell? Top achievers do. Customers want to work with knowledgeable experts. In fact, “knowledgeable” was the most common descriptor of top achievers.

Study your target opportunities, study their industry, and study your profession. The more you learn, the more value you create. If you’re not spending two hours per week studying, you’re missing an opportunity to create more value.

Don’t expect this investment to provide an immediate gain. Instead, take a long-term view. Professional study is like amassing a large inventory of value-added insights and ideas. Each new thing you learn is placed on the shelf. When the timing is right, you’ll be able to pull from your inventory and deliver your value-added insights in a compelling way.

If you want to be a top achiever, then study and research like a top achiever.



RESULTS-ORIENTED



Top achievers get things done. When nobody else has inventory, top achievers find it. When customers need something pushed through, top achievers take care of it. Top achievers focus on results, enabling customers to achieve their goals.

Top achievers abide by the mantra, “if it is to be, it is up to me.” Top achievers understand how to get things done internally. They understand the internal workings of their company. They apply pressure when needed, to get things done for the customer.

If you want to be a top-achiever, then deliver results like a top achiever.

PROBLEM SOLVERS



Top achievers don't look for products to quote, they look for problems to solve. Top achievers explore problems like an investigative journalist. They ask questions, research, and expose problems. Oftentimes, top achievers inform customers of a problem they didn't know they had.

In our training seminars, salespeople often say, “Well, it's hard to find problems to solve.” Problems aren't always easy to find or obvious to solve. That's why most salespeople give up.

The key is opening your eyes – problems have a funny way of hiding in plain sight. Salespeople often are blinded by their own ambitions. These sellers focus more on making a deal than making a difference. What if you approached an opportunity with the mindset of solving problems versus selling products?

If you want to be a top achiever, then solve problems like a top achiever.

RELATIONSHIP-ORIENTED



How would you describe your personal and professional relationship with your customers? Our research shows that customer relationships matter to both salespeople and customers. In our latest buyer's study, we asked a group of decision-makers why they would choose one supplier over another. “Relationship with the salesperson” ranked higher than price. So much for the pundits who think relationship selling is dead.

Relationship building is more than just showing up with donuts. You need to show and create value. Strong relationships are built upon the foundation of trust. Meaning, the salesperson must deliver the good news and the bad news.

Top-achieving salespeople know that the sale is about the customer. They make it a point to focus more on the customer's needs than their need to sell. They make it their mission to make the customer a hero.

Entertainment is critical to relationship building. In fact, 71 percent of top-achieving salespeople indicated they use entertainment to build stronger customer relationships. Entertainment dollars are not an added expense. Entertainment is an investment in your customer relationship. But entertainment alone is not enough.

If you want to be a top achiever, then build relationships like a top achiever.

As mentioned earlier, only 12 percent of salespeople are rated as “excellent.” This same study showed that 65 percent of salespeople are rated as “average” or “poor.” This indicates there's a good chance your competition is an average value creator. Your personal value produces a significant competitive advantage. The worth of a salesperson is measured in the value they create, not the discount they give. The only limit to your personal value is the edge of your imagination. ■

*Paul Reilly is a speaker, sales trainer, co-author of *Value-Added Selling*, fourth edition (McGraw-Hill, 2018), and host of *The Q and A Sales Podcast*. For additional information on keynote presentations and seminars, call 636.778.0175 or email Paul@ReillySalesTraining.com. Visit TomReillyTraining.com and signup for a free newsletter.*

Marketing in the time of **Coronavirus**

10 Ways to Prepare for Business as Usual

What started as a problem halfway around the world quickly became a global pandemic. One day we're reading about it online; mere days later, we're banned from traveling, everyone's practicing social distancing, and we're all working from home.

In the short-term, COVID-19 has impacted supply chains, making it difficult to get some products. However, as the virus reached the states and concerns grew about it spreading like it did in other countries, schools shut down indefinitely. Restaurants and bars temporarily closed, as did major retailers. Work halted at construction sites in cities like Boston, where workers were asked to stop until further notice. And, in late March, several governors starting with New York, California, and Illinois, put their states on lockdown, ordering residents to stay at home unless traveling for groceries, gas, or medicine.

Retailers with online storefronts are offering discounts, storewide sales, and other promotions and incentives. That may not be enough to stimulate large flooring purchases or projects that often require measuring, samples, and in-person consultations.

As of this writing, much of the nation's commerce is at a standstill until at least the end of April, and most likely later. The economic uncertainty will keep people's hands clutched tightly around their pocketbooks, at least until the stock market rebounds, and companies start reopening and rehiring.

The good news is we will return to normal business operations – we just don't know when. It's that uncertainty that makes us feel out of control and unproductive. Marketers can still take actions now to prepare for the eventual return of business as usual.

We can sit and wait, or we can use this time as an opportunity. Let's do all those things we'd do if we weren't busy putting out fires and completing the day-to-day tasks that demand our constant attention. The following are 10 ideas to get you started.

RECONNECT WITH REAL PEOPLE

Call past customers just to say hello. Better yet, use Zoom, Google Hangouts, or your teleconferencing software so you can interact face-to-face. If you need a business reason for calling, see if they have questions about or issues with past projects, or ask for referrals or testimonials for use in your marketing materials.

Maybe you've intended to find new vendors, freelancers, or other service providers. Do the research and make some calls.

Besides the obvious benefits, we could all use a little more human interaction right now.



GET SOCIAL

Update your profiles, including photos, hours, and staff. Build your social media following with helpful or interesting content. Consider topics like:

- Should you replace or repair your wood floors?
- Caring for your wood floors
- Finishes and your floors... what are your options?
- Trends in wood flooring

Experiment with new features on the platforms you're already using, and learning new platforms your target audiences are using, or will be using in the future.

REEVALUATE YOUR WEBSITE

Look at your website with a fresh eye and ask yourself, "Does it still accurately reflect who we are and what we do?"

- Have you added new capabilities, staff, products, or services?
- Does your website match your image and brand?
- Do you need to update the photos, content, design, or navigation?
- Should you add functionality like online payment or scheduling?
- Would an updated portfolio, product selection, or testimonials make your website a more effective sales tool?

Check out your competitors' websites, as well as those of companies in other industries to see what's possible.

CREATE OR UPDATE YOUR COLLATERAL MATERIALS

Evaluate your brochures, sales pieces, and other literature that you give to customers.

- Do you have a corporate sales piece or brochure? Do you need one?
- Do you need to upgrade your brand identity, logo, or business cards?
- Consider creating an assortment of standard ads in various sizes for all those programs, sponsorships, and community events you buy ads in throughout the year.

If you put thought into it now, your materials will all have a consistent look and feel, and you won't be rushed to produce them throughout the year.





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CREATE CONTENT

Great content, when used well, serves a number of marketing purposes. It builds relationships with customers. It reinforces your brand. It establishes you as an expert in your field. And, it gives you a reason to stay in touch with your customers, so when they need what you're offering, they'll think of you first. Content can take many forms. Here are a few:

- Write a blog.
- Publish an article in a trade publication.
- Record an educational or informational video or video series.
- Produce a podcast or series of podcasts.
- Develop case studies about successful projects.
- Create an online portfolio.
- Start a Pinterest page for your business.
- Send information-packed emails.
- Create infographics.
- Conduct research such as a survey, quiz, or questionnaire.
- Write an e-book.
- Develop a free guide.

- Send text messages.
- Use Instagram, Facebook, or YouTube stories features to post short snippets of valuable information.

Of course, you don't need to use all of them; just a few will do. Choose the ones that your audience will respond to best.

RETHINK YOUR MARKETING PLAN AND STRATEGIES

What are your marketing goals? Do you want to build brand awareness, expand your customer base geographically, or introduce new products or services? Who are your target audiences? What strategies and tactics will you use to reach these goals?

- Evaluate past activities and think about how you might improve them.
- Plan ahead for annual or recurring events and activities.
- Consider pursuing new target markets.

Start by listing your marketing activities from the past year. Which ones yielded measurable results, and which ones didn't? Which activities have you repeated simply because you've "always done them"? Which ones should you keep, and which should you eliminate?

REVIEW PROCESSES AND PROCEDURES, AND STANDARDIZE RESPONSES

Look for ways to avoid reinventing the wheel. Come up with standards and guidelines for handling repetitive tasks, situations, and decisions such as:

- Responses to Google, Houzz, Yelp, and other reviews – designate someone to handle them and prewrite responses for various types of comments.
- Requests for contributions, sponsorships, or ads in local event programs – set a budget and establish criteria for giving and use your predesigned ads.
- Pitches from media and other vendors – for those you don't intend to pursue, write a standard response such as, "We have evaluated your company and offering, and don't feel it fits our goals and target audiences at this time. Should our situation change, we will keep you in mind." If they persist, respond with, "Thank you for your interest, but our decision is final."

Having standardized processes and responses will enable you to easily delegate these responsibilities to an administrative assistant, and save you time spent crafting responses.

DEVELOP A CRISIS PR/COMMUNICATIONS PLAN

If we've learned anything from the COVID-19 outbreak, it's that anything can happen. Companies without a plan have been scrambling to communicate with employees, customers, vendors, and other stakeholders. Here's what you can do to prepare for the next crisis:

- Take notes now about what you're doing.
- Use this experience as an outline for a plan.
- Update your customer contact lists.
- Start using an email or marketing automation platform to enable instant and professional communication with your key stakeholder groups. Start with an easy platform like Constant Contact or Mailchimp.
- Search for articles, templates, and examples online. Here are a few resources:
 - » bernsteincrisismanagement.com/the-10-steps-of-crisis-communications/
 - » ready.gov/business/implementation/crisis
 - » Local colleges and universities
 - » The SBA, SCORE, and your state's Small Business Development Center

There will be another crisis; next time, you can be ready.

CONDUCT RESEARCH

Instead of thinking, "Yeah, we should do a survey," start by thinking in terms of the "big questions" you'd like answered.

- Are people aware of us?
- What are potential customers' perceptions of us?
- Why do people choose to do business with us?
- Why do people not do business with us?
- How do we compare to our competitors on key criteria?
- What would it take to get our competitors' customers to switch?

Should you conduct a survey, focus group, personal interviews, or some other form of market research?

Surveys are most useful when you can choose a sample that statistically represents your target group, say customers. The data you collect from this group is most likely to accurately represent the opinions of the larger population of customers.

Let's say you don't even know what the issues are, or you think you know, but you're not sure. A focus group or even individual interviews are more likely to uncover ideas or opinions you may miss in a survey.

LEVEL UP YOUR SKILLS AND EDUCATION

Maybe you've been intending to learn more about SEO, marketing automation, social media, or retargeting. Now is the time.

- Take an online class from your local community college or university.
- Check out American Marketing Association webinars and workshops.
- Visit marketingprofs.com for free articles, free webinars, paid boot camps and courses, and a training subscription.
- Vendors from all kinds of platforms and services offer free webinars and workshops.
- Read those articles you've been setting aside for a rainy or slow day. (It's here!)
- Learn about Google analytics: marketingplatform.google.com/about/analytics/.

You know there's a wealth of information online at your fingertips. The hard part is prioritizing and finding a starting point. No one's going to give you a test, and you won't be graded. So just jump in and start reading and learning.

Everyone's talking about how uncertain the future is. While that may be true from an economic or social standpoint, you can be certain about how you'll spend your time in the next month (or three). Make the most of it. ■

Katrina Olson is a marketing consultant, trainer, writer, and principal of Katrina Olson Marketing + Training. Reach her at katrina@katrinaolson.com.

BUSINESS BEST PRACTICES

REACHING A&D 



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Staying the Course with **Specification**

Many firms aspire to promote hardwood flooring to the architectural and design (A&D) community, but they often don't really have a handle on the exact meaning of "architectural specification."

A specification ("spec") can be defined as a document listing various points regarding a product or process. For example, an A&D design specification could include data such as desired visuals, required dimensions, thickness, aesthetics, maintenance that will be needed, and much more. In some cases, it also could ask for clear examples of how the design should be executed. "Getting specified" is clearly not an overnight process, nor is it an easy one. However, when one considers that being specified can result in a highly visible "portfolio project," in addition to the fact that it may be quite profitable, there is every reason to put on your game face and go for the gold.

To learn more about getting specified, we reached out to the Belknap White Group's Jane Twombly, Director of Specifications/LEED Green Associate, and Sean Connolly, Regional Vice President of Sales.

Describe how approaching the A&D community with new hardwood flooring products is a whole different approach than doing so to the dealer sector.

Jane Twombly: The process is quite different. In particular, because architects are so critical in regards to aesthetics, in many cases decisions may depend heavily on visuals. Does your

product match the desired "look" of the project? And, of course, does your product fit into the budget? There are other factors, as well.

What are some different ways to make a presentation to an A&D audience?

Twombly: We have found it beneficial, along with one of our wood flooring vendors, to deliver a continuing education unit (CEU) presentation to architects and designers. After the CEU course is covered, the vendor then has time to talk about new products. This has been an excellent procedure to educate and engage our audiences.



Simple “lunch and learn” presentations also can be very beneficial. Unlike delivering a CEU course, when those in attendance are gaining educational credits, lunch and learn sessions can be more informal. Often times, we present slides just on product offerings.

In a typical lunch & learn event, how many attendees usually show up?

Twombly: The range can be as low as four, or upward to 25 or more. It all depends on the size of the firm, who is available, and who is interested in the topics and products being presented.

Why does it take a specification much longer to run its course than a typical “selling container” transaction?

Twombly: There are many phases taking place with a design product. When it comes to selection of wood flooring, the first item to be addressed is usually finishes, which initially are selected in the schematic development phase, and finalized in the construction document phase. Because the specifying company has other suppliers, offering not just A&D products, but also structural ones, the overall process from the time specified to time purchased, often can be well over a year or more.

Because of this extended time period from specification to finalization, what are some of the risks involved?

Twombly: Often after products have been selected, somehow another vendor with a lower price finds and then contacts the specifier. In some cases, the specification then is switched and awarded to the entity offering the



Jane Twombly



Sean Connolly

lowball cost. Our response to that is straightforward. Because the project can take a long time to be completed, it's important that specifiers work with an established, ethical, and financially stable vendor that will be around for years to come, for obvious reasons. Two, if the project ever needs replacement products or if there are future rollouts of this design build-out in a different location, a solid company will be ready to provide service to these needs.

What are compelling reasons why A&D people specify hardwood flooring?

Twombly: A great example is when someone walks into a multifamily project; a true wood floor immediately gives off a higher-end, luxurious look. Compared to the many products that imitate it, hardwood flooring is synonymous with the term “greater resale value.” Also, because wood flooring typically is not specified in certain commercial sectors, such as healthcare or education, there is a sense of exclusivity with every true hardwood flooring commercial project.

What are some of the solutions your firm has offered to A&D projects that specified hardwood flooring?

Sean Connolly: We pride ourselves as being a solutions company. If an architect or designer wants a particular

specification of 1/2” planks changed to 3/4” planks, we find a way for that to happen. If we're challenged to meet spec changes, such as demands for the flooring units to be longer or shorter in length or wider in width, we find a way to fulfill this request. Be a good listener and respond with helpful and 100 percent truthful solutions.

What are some of the changes in product offerings in the last few years?

Connolly: Everything seems to be cyclical. For example, wood flooring chevrons are the hot item now. Ten years ago, simple planks were being specified. Today, with construction techniques continually getting better and better, in particular with engineered floors being nearly as durable as 3/4” solid floors, the customer can get what they dream of.

Large scale European design parquets have come back. Herringbones and chevrons in much larger sizes are gaining in popularity as well.

Installation products now are being sold as “installation systems” and are available through some of our major sundries manufacturers. These companies now offer product solutions that don't just glue down the floor, but also provide sound dampening, self-leveling, emit no VOCs, and are waterproof.

It's our job to educate the A&D community on these new design trends and performance factors. This is how we become not just a product supplier but a true source of information for our A&D partners. ■

Ron Treister is the President/Owner of Communicators International Inc. He can be reached at rlt@communicatorsintl.com.

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exceptional performing products, superior service, and a problem-solving approach ensuring success with every job completed. We guarantee PoloPlaz products perform to exceed expectations. They are all made in-house from proprietary formulations, designed specifically for the intended application and higher-quality standards.



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This article was provided by Valentus Specialty Chemicals. For more information, please call 800.432.4333, info@valentuschem.com, or go to valentuschem.com.

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**Installation
Guidelines**

A MOST VALUABLE RESOURCE By Burt Bollinger

The National Wood Flooring Association (NWFA) published a new edition of the NWFA Wood Flooring Installation Guidelines. The new publication represents the most comprehensive revision of the Installation Guidelines since they were first published in 1988.



WOOD FLOORING INSTALLATION GUIDELINES

Revised © 2019

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ABOUT THE NEW NWFA INSTALLATION GUIDELINES

Topics include evaluating job site conditions, subfloor preparation, proper installation techniques, guidelines for moisture testing, fastener schedules, radiant heat installations, and much more.

NWFA INSTALLATION GUIDELINES HIGHLIGHTS INCLUDE:

- Content has tripled in size, providing more in-depth information on topics including job site conditions, acclimation/conditioning, moisture testing, basements/crawlspaces, substrates, underlayments, layout, installation methods, maintenance, and repair.
- Architectural CAD drawings have been added to help you specify and clarify descriptions.
- Photographs have been added to provide visualizations and to make these guidelines multilingual.
- Updated and improved artwork and illustrations.
- Responsible parties have been clearly defined, and include obligations for each.

THE NWFA INSTALLATION GUIDELINES CAN BE ACCESSED ONLINE

NWFA members should have recently received a physical copy of the Installation Guidelines and the new Regional Climate Variations in their mailbox. Members may also download PDF copies of the publications for free at nwfa.org.

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We spoke with Brett Miller, Vice President of Technical Standards, Training, and Certification for the NWFA, about the history of the guidelines and what to expect with the updates.

Can you share some perspective on the history and importance of the guidelines?

Brett Miller: The new Installation Guidelines are exciting for our industry, our members, and the NWFA. The guidelines are one of the NWFA's most valuable resources. They have been around for nearly forty years, and have become recognized as the standard for the wood flooring industry.

The first copywritten version of the guidelines was written in 1988. A decade later, in 1998, the Installation Guidelines

were re-released in a binder format. That release had a lot of updates done to it at that time. The binder format was done so that when we had updates, we could send out an individual page if necessary.

In 2007, 2012, and again in 2016, other revisions were made. However, the single most significant overhaul since its inception is what we have just completed. Rather than another revision, we rewrote the entire thing and did so in a format that matches our other publications. It was a massive undertaking.

One of our objectives was to remove the appendices from the guidelines, and instead go into great detail, chapter by chapter, on each different method involved in the installation process of a wood floor.

NWFA Installation Guidelines *(Continued)*

One of the updates is an “Involved Parties” section. Can you talk about that?

Miller: In the 2012 Installation Guidelines, we added a small section that defined all of the parties that were involved in the wood flooring process. With this update we felt it was critical to elaborate on this section. To me, this is one of the most essential parts of the new Installation Guidelines. It’s a section on page 26 that provides typical definitions and responsibilities of each party involved in the supply chain, including manufacturers, specifiers, suppliers, sellers, buyers, builders, installers, and end-users.

What are some of the other areas that have seen a large overhaul?

Miller: We dive deep into job site conditions, including exterior climate conditions and the thermal envelope of the building where the flooring is being installed. We wanted to give readers a simple way of understanding what job site requirements are.

We simplified information on acclimation and conditioning, but we also expanded on the topic by elaborating on acclimating solid versus engineered wood, as well as parquet, end-grain, and reclaimed wood flooring.

We also have a section on moisture testing that was created through collaboration with many of our meter manufacturers. We have guidelines that focus on basements and crawlspaces, where we refer to residential building codes and the different types of crawlspaces that exist.

Can you talk about the subfloor sections that are included?

Miller: In the new Installation Guidelines, we have separated out chapters on substrates. We now have chapters on wood subfloors, concrete subfloors, wood subfloors over concrete, screeds and sleepers, radiant heat, and existing floors. In addition to those chapters, readers will find chapters on moisture and acoustical underlayments. Each one of these chapters goes into tremendous depth and was made possible by us working with people outside of our industry, who are true experts on the topics.

Have there been updates done in regard to installation, specifically?

Miller: The first 115 pages are focused on preparation prior to installation. Those sections help professionals understand definitions, proper preparation, and what the substrate and the facility all require prior to ever considering us sticking a piece of wood in a bed of adhesive, or nailing it down to that subfloor.

From page 116 on, we focus on the installation process. We get into the layout. We highlight installation methods, where we have elaborated quite extensively on things like the nail-down process. In our prior guidelines, we were fairly vague on glue-assisted installation methods. Today, we have a whole section addressing common glue-assisted installation methods. We also have detailed sections on glue-down installation, floating floor installation, parquet installation, and end-grain.

Finally, we get into protection, care, maintenance, repairs, replacement, and removal. We made sure to include everything we could to assist professionals with knowing how to maintain products that are being put in, and how to sell that to the end-user. In terms of repair and replacement, we get into lacing in and lacing out, board replacements of glue down, nail down, and floating floors. There’s a lot of stuff that’s in the Installation Guidelines that we’ve all assumed for many years, but it just has not been in writing up until now. It’s rewarding to be able to do that and to share these new guidelines with our membership and our industry as a whole.

In the pages that follow, you’ll read more about updates to the guidelines with regards to responsibility across the supply chain, as well as lacing-in methods. ■



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Download the NEW Installation Guidelines



NWFA INSTALLATION GUIDELINES



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WHO'S RESPONSIBLE FOR WHAT?

The new Wood Flooring Installation Guidelines recently published by NWFA have made numerous updates, some improvements, some drastic changes, and the addition of defining the parties involved in the entire chain of wood flooring, from the manufacturer to the end-user.

Historically, the NWFA Installation Guidelines were written in a way that placed much of the responsibility, prior to-, during-, and post-installation, on the installer of the flooring. The reason was simple: the installer is the last true professional to see the product and put the product into use as intended. The fact is that the installer only has control of what conditions are **at the time the floor is being installed**, and is the final authority to determine whether the facility is appropriate or is not appropriate for the flooring being installed.

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The United States vs. Spearin, 248 US 132, also known as the Spearin doctrine, is a 1918 United States Supreme Court decision that addresses the limitations of, and liabilities of, the contractor for losses or damages resulting from insufficiencies or defects in plans or specifications.

So what does this have to do with the wood floor installer? It defines two things:

1. Ensures the wood floor installer is cognizant of how the floor is being installed, and to what environment the floor is being installed in, at the time it is being installed.

2. It points out that the installer has no control over what happens after the floor has been put into use.

The updated Installation Guidelines outline the industry-accepted methods and procedures for wood flooring installations. The chapter of these guidelines that defines responsibility is titled “Involved Parties.” The information in this chapter is considered to identify the typical responsibilities of each involved party within the supply chain. It is important to be able to identify each of the relevant parties, along with their specific roles, prior to

beginning each flooring project. Defining responsibility will help all involved parties clearly understand their roles in the process, and assist in minimizing potential future claims.

THE MANUFACTURER

The **manufacturer** is any individual or entity that physically manufactures a product, or has a product designed or manufactured for the wood flooring industry, and places it on the market under its own name or trademark. It is the responsibility of the manufacturer to produce a product, that will perform as it is marketed and intended to perform, based on the instructions provided. It is also the responsibility of the manufacturer to design and manufacture a product in accordance with all standards and regulations that apply to the product being sold. The product should contain labels identifying its contents, and should make available (in print or electronically), installation and maintenance instructions for the product being put to use.

THE SPECIFIER

The **specifier** is any individual or entity (including, but not limited to, architects, builders, consultants, design centers, interior designers/decorators, end-users, general contractors, flooring contractors, sales professionals) that recommends, specifies, or in any way advises the buyer prior to ordering, purchasing, and/or installing the wood floor products. It is the responsibility of the specifier to ensure that all job site conditions are capable of meeting or exceeding the minimum standards and requirements of the products being specified for the project. The specified wood floor must coincide with the projected interior climate capabilities of the facility receiving the wood floor. Interior climate capabilities of the facility include type and functionality of the HVAC systems, humidification/dehumidification systems, interior and exterior insulation, types of windows, and methods of construction. Interior environmental conditions vary from region to region and job site to job site. The wood floor selection should be determined by the interior climate



capabilities of the facility receiving the wood flooring. The floor selection determination may include species, cut, width, installation method, manufacturer requirements, or whether to use solid or engineered flooring for each unique situation.

THE SUPPLIER AND THE SELLER

The **supplier** is any individual or entity (including, but not limited to, distributors, wholesalers, importers) that receives product from a manufacturer and supplies the wood flooring products to a reseller or buyer. The **seller** is any individual or entity (including, but not limited to, retail stores, big box stores, internet sales, interior designers, vendors, direct sales) that physically supplies/sells the wood flooring products to the buyer. Both share similar responsibilities. It is the responsibility of the supplier and/or the seller to ensure all products being supplied meet or exceed the minimum federal and local regulations where it is being sold. The product should be stored in dry, climate-controlled, and well-ventilated facilities that meet the minimum requirements of the products being stored and sold. Products should not be sold to, or delivered to, a job site that does not meet manufacturer minimum requirements, or NWFA minimum requirements. Expired/outdated product should not be sold without clear acknowledgment by the buyer.



THE BUILDER

The **builder** is any individual or entity (including, but not limited to homebuilders, remodelers, general/restoration contractors, DIYers) that coordinates and oversees the different suppliers, trades, installers, and other experts involved in building or remodeling a home, office, or other building. If the wood floor installation is part of the scope of the construction project, it is the responsibility of the builder to ensure that all wet work (e.g., drywall taping, painting, texturing, tile work, etc.) is completed and thoroughly dry prior to wood flooring installation. Building codes establish minimum standards and not always best practices. The builder must be aware of the materials specified within the home in order to build accordingly. Any additional building costs must be accounted for during the specification and planning phases of construction.

In new construction, it is the responsibility of the builder and/or the specifier to ensure the facility being built is designed and capable of sustaining an environment conducive to the building materials being used in it. The job site must meet or exceed all wood flooring manufacturer requirements and NWFA Guidelines prior to wood flooring delivery and installation. It is the responsibility of the builder to ensure moisture control policies have been put in place and implemented to protect all building components, including, but not limited to, wood flooring, prior to and during, the entire construction process. Some porous materials (e.g., gypsum, plywood, and oriented strand board) can tolerate short-term wetting, but they must be dry before wood flooring installation (according to the U.S. Environmental Protection Agency).

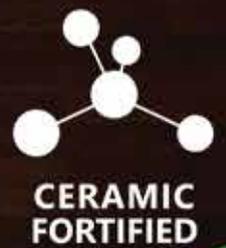
In water restoration projects, it is the responsibility of the builder and/or the restoration company to meet the minimum moisture requirements as outlined in these guidelines.

THE BUYER AND THE INSTALLER

The **buyer** is any individual or entity (including, but not limited to distributors, end-users, installers, flooring contractors, general contractors) that is the first to use/handle/possess/receive/deliver the wood flooring material prior to installation of the wood flooring product. The **installer** is any individual or entity that physically installs and places into service the wood flooring product. It is the responsibility of the installer to recheck the job site conditions at the time of installation and to confirm

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that they meet or exceed the wood flooring manufacturer's requirements. It is the responsibility of the installer, and/or the buyer and/or the end-user to ensure that the wood flooring product meets their expectations for visual appearance and manufacturing quality prior to installation. Prior to commencing installation, the seller, installer, buyer, and end-user should, when possible, loose-lay several boards on the floor in the room where they will be installed. If the visual appearance, color, sheen, or manufacturing quality of the product is deemed unacceptable, it should not be installed. It is important to remember that installation of flooring constitutes acceptance of the material and the site conditions at the time of installation.

THE END-USER

The **end-user** is any individual or entity that physically receives and uses the final wood flooring product. It is the responsibility of the end-user to use the flooring product as it is intended to be used. Post-installation, it is the responsibility

of the end-user to maintain temperature and humidity levels year-round, as required by the flooring manufacturer. It is the responsibility of the end-user to follow a maintenance routine and use the proper maintenance products as required by the flooring and finish manufacturers.

Everyone through the entire supply chain holds a certain responsibility to ensure the products are put to use the way they are intended. This is true for any product or service sold to any consumer, not just wood flooring. Plug any product (e.g., a bouquet of flowers, a T-bone steak, a Ford F150) into the above equation, and see for yourself how logical it becomes. The key is knowing your role, and ensuring you've done your part. ■

Brett Miller is VP of Technical Standards, Training, and Certification at the National Wood Flooring Association in St. Louis. He can be reached at brett.miller@nwfa.org.

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† Can help prevent cupping caused by excessive subfloor moisture.

‡ Radiant heat systems will have a maximum moisture protection of 6 lbs. or 80% RH.



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As part of the revision of the NWFA Wood Flooring Installation Guidelines, this article focuses on one section, which covers the "lacing-out" and "lacing-in" methods.

Lacing-In, Toothing-In, Weaving-In

Terms Unique to our Trade

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By Brett Miller

Regardless of what you call it, “lacing-in” is a skill that anyone in the wood flooring industry is familiar with and understands the complexities involved with doing it correctly.

Lacing is a method used to integrate a new wood floor with an existing wood floor. It often is necessary anytime the butt-end linear direction of an existing wood floor needs to receive new wood flooring. This may include extending or adding to an existing wood floor, adding wood into another room, where removal of the old floor is not the best option, or to replace damaged sections of existing hardwoods.

In the case of a remodel, the customer normally has the option to either add a header, or lace-in to the existing flooring, making for a seamless transition. Lacing-in is always a more time-consuming, and more-expensive option.

The process, although unique to every job, is essential to do correctly in order to avoid potential issues. In this article we will look at some common methods of lacing-out and lacing-in.

LACING-OUT

Removal of sections of the existing flooring is known as “lacing-out.” This lacing-out process sets the groundwork for how extensive the lace-in will be.

First, you must identify the existing flooring installation method. Your approach to lacing-out and lacing-in will be influenced by how the existing floor was installed originally. A nailed-down floor will be different from a glued-down floor, and if the floor is floating, you likely will be looking at a completely

different approach altogether. Secondly, make sure that you are aware of radiant heat systems or underlayments that may be installed below the flooring.

Once you have identified the installation method of the existing floor, you will need to identify and clearly mark the boards on the existing floor that will need to be removed. This generally will be determined based on the existing pattern of the old floor. When possible, try to remove and avoid “H” patterns, and blatant stair-steps. The objective of removal is not to damage adjoining boards and to leave a stagger that flows with the existing floor.

Depending on the existing installation method, removal can be a tedious job. I have seen wood floor professionals post videos of some very unique and very effective methods to remove boards from an existing wood floor - everything from using hammer drills to specialized extraction tools. Some boards may be easier to remove using some of these alternative methods and unique tools than what is listed here.

You want the existing floor to be laced-out and prepared in a manner that allows the new flooring to weave itself in so that when refinished, no one can tell new from old. A very simple way to extract boards without damaging the adjoining flooring when lacing-out, is as follows:

1. **Set your circular saw or tracksaw to the thickness of the flooring being removed.** Then make two cuts along the length of each board being removed. In order to release the board for easier removal, you will need to complete the cuts with a chisel.
2. **Carefully extract all of the cut pieces from the area using a hammer, chisel, and pry bar, without damaging the adjacent boards.** Removal of nail-down boards also will include pulling or setting the remaining fasteners in the subfloor. Removal of glue-down boards will include scraping the remaining adhesive from the subfloor thoroughly.
3. **Once the board extraction begins, you will be able to identify which direction the existing flooring was installed.** This becomes critical to the installation of the new flooring. Replacement material will need to be reinstalled in the same direction as the existing material.
4. **When possible, try to leave tongues and grooves intact on all of the remaining boards.**
5. **Dead-joints are joints that are created within the existing flooring that would be better suited to have a joint.** Dead-joints can be cut-in using an oscillating saw or similar.

If you would like to refer to more information from the new guidelines, NWFA members should have already received a hard copy of the Installation Guidelines in their mailbox. They may also download a PDF by visiting nwfa.org.

AT THE SITE

Lacing In and Out (Continued)



The remaining floor should appear to be as random and natural as possible. Leaving too many board-ends at the point where the previous header existed normally is not best practice. Once the extraction of all of the necessary boards is completed, thoroughly clean all debris from the work area.

LACING-IN

As with any project, demolition is often the easiest part. Lacing new wood into the old floor is where the skill comes into play.

One of the key components of lacing-in comes with the material being used. It is critical to properly identify the flooring material being matched. It must be the same species, the same grade, the same cut, the same width, similar average length, the same thickness, the same edge profile, and the same bevel. Modifications to replacement material may be necessary where dimensions vary. The customer also should be aware that some of the grain sequences of new growth woods will not match old-growth woods perfectly of the same species and cut. Some of the more color-sensitive species also will not match the same species, regardless of how much they all get sanded.

The new material should also be within a minimum of 2 percent moisture content (MC) of the existing surrounding flooring. If the moisture varies by more than 2 percent from existing flooring, you likely will see eventual gapping or cupping of the new or existing flooring. When working on a water damage claim, all of the affected flooring should either be removed, or allowed adequate time to dry properly prior to installation of any new flooring.

SO WHAT HAPPENS IF YOU ARE LACING-IN TO AN EXISTING FLOOR THAT WAS NOT INSTALLED PER MANUFACTURER OR NWFA GUIDELINES?

This is where your conversation with the customer will dictate the outcome of your new floor.

Existing flooring may not have been installed in the same manner in which the new floor will be installed. It is likely there will be pre-existing conditions that may include gaps between boards, squeaks, inadequate subflooring material, crooked installations, different fasteners, adhesive or other items that could adversely affect the performance of the newly installed flooring. It may be more aesthetically pleasing, and sometimes necessary, to replicate existing installation conditions when lacing into an existing, improperly installed floor. That said, this is only appropriate after you have discussed these discrepancies with the homeowner. Don't get caught holding all of the cards if they're not all your cards to hold on to in the first place.



Where moisture control is necessary (over concrete or over unconditioned spaces), a quality wood flooring adhesive or a liquid-applied moisture retarder may be used.

The new boards are installed into the existing pattern of the old floor. Where the tongues or grooves in the existing flooring have been compromised, it will be necessary to create a new tongue and groove, or shiplap joint, between old and new floors. This may be accomplished with a router and the appropriate profile grooving bit to allow for the spline to be used as the shelf for the shiplap joint. Maintaining tongue and groove is a key component to lacing the new flooring into the existing.

Boards are driven into place carefully in a sequence that allows for adequate installation of the remaining new flooring. When the existing floor has existing gaps, you may need to either replicate those gaps or modify the material to blend in with the existing.

Where new flooring boards can be blind-nailed, the appropriate nailing schedule for the flooring being installed should be followed. Where the new flooring cannot be blind-nailed, or when lacing-in a glue-down floor, use of an elastomeric wood flooring adhesive must be used.

Once the lace-in is completed, it is time to sand everything flat and begin the finishing process. Sanding a laced-in floor can sometimes be challenging, depending on the wear layer/thickness of the new flooring versus old flooring. This area often requires more attention during the sanding process to ensure the transition is not obvious.

Whether this is the exact process you use when lacing-in/lacing-out, or if you have your own process, the end result should be the same. The customer should not be able to pick out where you started and stopped in most cases. As with everything in our industry, there are always exceptions to the rule. We work with natural products, that behave naturally. ■

EFFECTIVE REPAIRS

Tips for color consistency

We all have seen scratches and dents before. Many of us have even caused them. No one wants to see a scratch on anything, especially your floor. Obviously, we want to make the scratch go away or at least be less obvious to the naked eye. An effective repair may be to use a marker made specifically for wood to color the scratch. Markers vary in color and function, so choosing the right type of marker will improve your results.

Repairing or touching up scratches that go with the grain are much easier than those that go across the grain in woods. Darker colors typically are easier to repair than lighter colors. Sometimes scratches also are more like gouges that need to be filled, which may require a professional to get passing results.

Scratches that go through the color and into the wood usually will go darker than expected when marker colors are applied because the fibers of the wood are roughed up from whatever caused the damage. This will cause most marker colors to look several shades darker.

A great rule of thumb is to always choose a marker color that is lighter than you believe you need. This will allow you to apply two or more applications and gradually build the color to a better match.

Finding a close color match at big boxes or other local sources is possible, but not always easy. Color selections often

are limited. Read the labels carefully to understand what you are getting. Some markers contain color and a finish, which helps with adhesion and prevents removal from wear. Others may just contain a stain that should be coated with a separate finish to protect against wear.

Also consider the size and type of tip when choosing a marker. Some tips are wider, while other tips may resemble a small brush that is great for precise control. Larger selections of color and tip styles that are designed for repair work on wood can be found easily with online searches.

The final marker tip to remember is to always blend with your finger or a soft cloth immediately after applying to soften the harsh lines that usually are left during application.

With some practice, it is possible even for a novice to make good scratch repairs using markers.



By Dean Cardin and Andrei Kerpan



Scratches may be the most-common floor blemish, but dents are a close second. Luckily, there are many alternatives for repairing dents in flooring products. These products include wood filler or putty, and even steam. All of these choices can create successful repairs if used in the correct situation.

Wood fillers and putties are probably the most-common products used to repair dents in flooring because they are easy to find, come in a variety of colors, and are relatively easy to use. Basic directions are to overfill the defect, allow to air dry, and sand smooth. The repair usually needs to be coated with a compatible finish (for example: polyurethane, lacquer, or shellac) before applying an appropriate marker to blend into the surrounding area. For best results, you should add another layer of finish to protect your repair.

Steam is the oldest form of repairing dents because it swells the compressed fibers. It does have limitations, since it only can be used where raw wood is exposed, but when used correctly, it can often preserve the wood surface. Steam normally will work most effectively on dents 1/16" or less in depth (length and width can be of any size). Where a dent is present but raw wood is not exposed, it will be necessary to cut the finish to expose raw wood. Next, add drops of water to the dented area. Cover the dent with a cotton cloth and iron over the area. Keep the iron moving to avoid burning the surrounding floor and take your time until all of the water is evaporated. This will cause the wood to swell and should be repeated until the dent has become level with the surrounding area. Practice on scraps until you perfect this method. ■

Dean Cardin and Andrei Kerpan are National Sales Managers for Mohawk Finishing Products in Hickory, NC. Reach them at 800.545.0047 or visit mohawk-finishing.com/contact.

PRO TIP:

Apply some type of finish, like a waterborne polyurethane or lacquer, with a small artist brush on the scratch and allow to dry. Lightly sand with fine sandpaper before you apply the marker. This will help prevent the marker color from biting into the fibers and going too dark too quickly.



PRO TIP:

Pick the filler product that is the closest color match to the lightest color you see in the floor. It's much easier to add color and make it darker, than to lighten a color.



Steam is the oldest form of repairing dents because it swells the compressed fibers.



By Greg Mihaich

The Importance of **Abrasive Choice** in Floor Repairs

Every contractor has come across this situation. You've just finished working on a floor, taking the time to make sure your sanding, staining, and finishing were as close to perfect as possible. Then you get the call from the homeowner that the floor is damaged from moving in furniture or appliances or something leaked. It's disheartening. While sanding and finishing a floor is hard enough on its own, doing a repair on a small area and trying to have it blend in seamlessly with the rest of the floor can be a daunting task.

Repairs are an unfortunate part of a contractor's daily routine. Aside from damage to new work you just completed, you probably also will come across situations where you need to do repairs on older floors or spot repairs while in the middle of staining. Doing repairs on older floors can be especially difficult because of faded stain color, darkening of the wood, or yellowing finish. While most of the focus is spent on how to match a color or sheen, an often-overlooked key component to achieving a seamless repair is the choice of abrasives, sanding sequence, and the process for the repair.

One thing many people overlook about the repair process is that you are not just trying to match the color and finish sheen. You also are trying to match the texture of the floor. Even if the color and sheen match perfectly, if the repair is much smoother than the surrounding floor or the spring grain isn't as exposed, the repair will stand out. That's why abrasive choice and sanding process matters so much.

Ultimately, the final color of a floor, the quality of the finish, and appearance are dependent on the sanding process that was used. Ask 10 contractors about their sanding process and you will get 10 different answers. If you are doing a repair on one of your floors, then you're ahead of the game because you know how the floor was sanded. However, when dealing with a floor that was done

by another contractor, you'll have to look for any visual cues and take your best educated guess.

Make samples and experiment with different sanding processes and colors until you get a match. What you don't want to do is experiment on the floor, applying color and sanding it off until you get the right match. Over-sanding the area will create a depression, which will be visible when the repair is completed. You want to do the minimal amount of sanding on the floor to ensure the repair is seamless.

It can help to understand some of the differences between abrasive products. The minerals on all abrasives aren't the same. Contractors have many choices in the minerals used on abrasive products today, including silicon carbide, zirconia, ceramic, and aluminum oxide grains. All are different in shape and size, and leave a different sanding profile, which affects the overall finish of the floor. If you are doing a repair on a floor you worked on and know the products you used, it is best to stick with those abrasives for your repair. If you are doing a repair on a floor that was done by someone else, you will have to take an educated guess on the abrasives used and experiment with samples. In either case, it's best to stick with actual floor sanding products for the repair instead of using standard hand sanding sheets or orbital discs.



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AT THE SITE

Abrasive Choice (Continued)

Most hand sheets and orbital discs are made with aluminum oxide grain, which is blocky in shape and leaves a much more shallow scratch than silicon carbide, zirconia, or ceramic grains, which are the primary grains used for floor sanding products. Using products with aluminum oxide grain can sand the surface too smooth, affecting the color and appearance of the floor.

Another thing to consider is the difference in sanding profile between machine sanding and hand sanding. Because of the weight, pressure, and speed of sanding with a belt sander, edger, buffer, or multi disc, the abrasive grain on the belt or disc is pushed into the surface of the wood more than you can achieve with just hand sanding. This means you can get a different sanding profile from the sanding process during a repair, opposed to when the floor was originally sanded. Though it may sound counter intuitive, you may have to drop down a grit when doing the final sanding on the repair than what you typically would have finished the floor with. A coarser grit used under lower sanding pressure can help match the sanding profile of a finer grit. In some cases, the process of water popping can help to negate minor differences in the sanding between the repair and the existing floor, but even doing that will not always work and may make the repair area more noticeable.

For most smaller repairs, the first step in sanding will be to use the edger to flatten out the repair. It's best to use the finest grit possible to avoid dishing out the floor. Typically, the next step would be to use an orbital sander to remove the marks from the edger, dropping down a grit or two from what the floor normally would be sanded to, followed by hand sanding with the grain of the wood using a folded edger disc. Mimic the sanding

Doing repairs on older floors can be especially difficult because of faded stain color, darkening of the wood, or yellowing finish.

profile of the surrounding floor as close as possible.

In the case of floors that were final sanded with a screen, some people go the extra step to use a cut piece of screen on a maroon pad backer to sand with the grain of the wood in an arc, to mimic the sanding direction of a clogged buffer, to impart a similar scratch pattern to the rest of the floor. If the floor was finished with a multi disc machine, then the orbital sander can be your last step in the process, but use the same type of floor sanding abrasive typically used on the multi-disc sander.

One area that you do want to sand as fine as possible is where the repair meets the existing finish. There are two types of repairs that can be done. Some contractors will tape off boards, then sand the area and scrape up the edges of the existing boards to make their repair, while others will sand out into the existing floor and use the process of grain chasing to help blend in the repair. With either method, you want to make sure the edges of the existing finish are feathered out and very smooth so there won't be visible lines when the repair is coated. Use a very fine abrasive, typically 400-600 grit and in some cases finer, to make sure the edge is feathered with no ridges and no fuzz.

With the growing popularity of natural oil finishes and how integral buffing pads are to the application process, it can help to understand some of the differences when trying to do repairs on these types of finishes.

Floor pads have varying degrees of aggressiveness and many are coated with

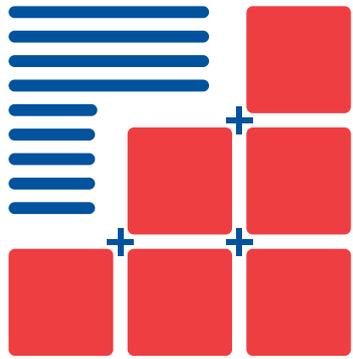
abrasive grain. The two most common pads used in the process are white and red pads. White pads have no abrasive in them; they use a light denier fiber, and have less resin than other pads, so they are ideal for polishing. Most red pads don't contain any abrasive, but use a heavier denier fiber and more resin to make them stiffer and more aggressive. Similar to the sanding process, using a pad by hand is going to give different results than using the pad in a buffer with higher speed and pressure. When doing spot repairs by hand, you will have to change your process and the types of pads you would have used on the buffer to get the sheen to blend with the existing floor.

Just like with wood sanding where you need to drop to a lower grit, you most likely will need to use a more-aggressive pad on the repair to get the sheen to match to the existing floor. This could mean using a green pad, which for most manufacturers is the next most-aggressive pad to a red pad and contains fine abrasive. Some contractors even will use a very fine steel wool or synthetic steel wool to blend the repair.

No two floors or finishes are the same, so the repair process always will involve a little bit of experimentation. Achieving seamless repairs can be an art, but understanding a little about the science behind abrasives and the sanding process can help you get that perfect repair. ■

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MAINTENANCE TIPS FOR SANDING EQUIPMENT

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Sanding equipment is a big investment for wood flooring installers. Protect that investment by following these tips for properly maintaining your equipment.

Owner's manual

The very best thing that you can do, for any of your equipment, is to read and follow the proper way to operate the equipment and the recommended service schedule that is outlined in your owner's manual. Knowing how your equipment works and how to care for it is valuable information that can save you from costly mistakes and repairs.

Listen to your machine

I know it sounds crazy, but anyone who runs equipment every day knows what it sounds like when you are running it. Any change in sound, such as a high-pitched squealing, a thumping sound, or even the sound of the motor bogging down, can mean that your machine is in need of repair. The sooner you take your equipment in to get checked can save you money by keeping something minor from turning into something major. Make sure to use a certified service center to have your equipment worked on; otherwise it may void your warranty.

Electrical

It is critical to know the voltage you are getting before you run your sander. The easiest way to determine voltage is to use a volt meter. Using your voltage meter, test the plug end that you will be plugging your machine into. In the United States, the electrical grid varies to such a degree that on a 220v outlet, you can have anywhere from 200v to 260v. Improper voltage can lead to deterioration of all electrical parts and the motor.



By Shawn Carrier

Brushes, plug ends, and cords

You also need to make sure you are checking your brushes, brush springs, plug ends, and cords regularly.

Lubrication

Refer to your owner's manual or ask your certified service center for the right amount and type of lubricant to use.

Drums

Every time you change the belt, you should inspect and clean the drum. Any dust, dirt, or debris can cause chatter marks. If the drum surface is damaged, it should be replaced. Make sure you check the top roller too. You also want to clean and grease the paper tensioner and feather handle.

Edger Pads

Before each job, you should inspect the pad for damage, dirt, debris, or wood filler, all of which can damage the floor during sanding. Any damaged pads should be replaced.

Wheels

Before each job, you also should inspect the wheels for damage, dirt, debris, wood filler, or finish, all of which can damage the floor during sanding.

Bearings

To properly maintain the machine bearings, refer to the owner's manual for service intervals. Again, listen to your equipment. Any change in sound could mean a bearing is going bad and you should get your equipment looked



at by a certified service center. Bad bearings up the amps and can make it get hot, causing electrical damage and/or chatter.

Belts

You should inspect your belts periodically. Any rough, worn, grooved, or damaged belts should be replaced. Make sure you use belts that are recommended by the manufacturer.

Loosen belts every time you are not using your equipment. The belts become very warm as the machine is running, and leaving them tight on the pulleys will make your belts set to the shape of the pulleys, causing vibration or chatter the next time you run your equipment.

Dust filters, tubes, & chambers

Be sure to clean out filters, tubes, and chambers regularly. Keeping them clean of dust and debris will keep your dust control system working better. Remember, blowing off your machine is not the same as blowing out the machine. Replace your filter regularly. And remember, a vacuum only works as well as you maintain the filter/bags.

PRO TIP

When you buy equipment, put the owner's manual somewhere it won't get lost.

REMEMBER

Dust is a fire hazard. Never leave it unattended. Make sure you dispose of it according to OSHA requirements.

Storing your sander

Any time your sander is not going to be used for any extended period of time, you need to loosen the belts and set the machine up on blocks to protect the wheels. Being stored on the wheels can leave "flat" areas on your wheels from the weight alone.

Storing your edger

Any edger with a rubber pad should not be stored on the pad.

Final thoughts

The equipment you purchase is a huge investment. I would like to reiterate how important it is for you to read, understand, and follow what is in your owner's manual. ■

Shawn Carrier is ProShop Specialist/Manager at Denver Hardwood in Denver. He can be reached at 303.296.1168 ext. 193 or scarrier@denverhardwood.com.



By Drew Kern

The pitfalls of offering remedial action in an inspection report



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Whether you are a certified inspector writing a report for your commissioning party, or the person designated to write a reply on behalf of the manufacturer, distributor, or retailer, etc., there are risks involved with providing suggestions for “how to repair,” also referred to as “remedial action.” The reader or audience of your report or reply letter generally is looking for two things: first, who’s at fault for what went wrong, and second, how do we fix it?

For those who are certified inspectors (or deal with certified inspectors), we teach not to include any forms of remedial action within a report because of the risks and assumed liabilities involved. It is only appropriate to include remedial action within a report if specifically contracted to do so. Section #9 of the NWFA Certified Professionals Wood Flooring Inspectors Standards of Professional Conduct states: “*if contracted to do so, to recommend appropriate remedial action and to state my commissioning party’s request of services in my report.*” Therefore, inspectors can include this in their report, but the dangers of mistakes and pitfalls still exist.

Most would agree that with a well-written report or reply letter that has a fully supported conclusion, the appropriate repair would be obvious. However, in some cases, this is not so simple. For example, have you ever had a case where the homeowner was demanding a new floor when repairs such as a simple touch-up or board replacement easily could be done? I mediate these claims by explaining that if there is one part on my car that is defective, the dealer is only going to replace the defective part and not replace the entire car. Having said that, it always is recommended that a site visit and complete investigation be conducted before suggesting any form of repair.



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SCAN TO DOWNLOAD APP



Too many times, I hear of flooring professionals telling homeowners how to solve their concerns with the floor and suggesting a remedy over the phone. For instance, telling them it is moisture related, when they have no readings of the current moisture levels.

The Mistakes and Pitfalls

In my business of managing flooring claims, the biggest mistake I see is when the parties involved have misdiagnosed the primary cause of the issue. I have seen manufacturers warrant and replace floors that actually were a site-related issue and did not have any manufacturing-related defects. If my mechanic has not diagnosed the problem properly with my car, then he merely is replacing parts and conducting service that is redundant, all without fixing the problem.

As an inspector, it often can be difficult to keep bias at the door when assessing a floor and suggesting a remedy. The natural relationships built between certain parties cannot get in the way. As an inspector or claims analyst, we must stick to the facts and only the facts when analyzing failures and writing a report or reply letter. It's easy for an inspector to come in and state that a floor needs a full replacement so the paying homeowner gets what they want and the installer gets another paid job. It is considered unethical for anyone to bias a report for the benefit of any of the involved parties.

A proper evaluation and diagnosis would be critical if one was providing a remedy that was going to be settled by financial compensation. The suggested remedy has to be achievable with a reasonable expectation of success. In other words, more than a mere guess.

Imagine a situation where compensation was awarded for a board replacement, but matching material was no longer available.

Even when the cause of the concern has been identified correctly, the suggested remedy also has to be thorough and accurate. I was recently on an inspection where the installer wanted to do adhesive injections on 2,000 square feet of engineered hardwood that was squeaking due to using the wrong size fastener and incorrect spacing. This floor clearly could not be saved and the remedy must be a permanent fix to bring the floor to proper industry standards so that the floor will be sustainable throughout any seasonal changes.

simply refer to the Problems, Causes, and Cures technical publication. Be detailed, accurate, and concise from the initial site inspection, right down to any report or reply that you have written. The truth is your friend in court and dealing with any and all claims.

The main take away when it comes to providing remedial action in any form of a report is to suggest each and every form of repair, as long as it is appropriate. Basic economics will dictate the outcome on which remedy will be implemented. If there is a floor that has one board squeaking when it is walked on, replacing the entire floor should fix the issue, but so would a plank replacement or perhaps adhesive injections. You can see which

It always is recommended that a site visit and complete investigation be conducted before suggesting any form of repair.

Now for the challenge. Anything that you write (or perhaps say) could end up in court and you will be cross-examined and challenged on the words you choose to write, or choose to omit. Imagine if you recommended a remedy for repair that is inappropriate or ineffective. A sharp attorney will be able to articulate a case and defend their client based purely on what you have written. This can be equally as dangerous as not providing all forms of remediation. Trust me on this one – if the matter gets to court, you will be questioned on the documents that you have written. The easiest way to provide all possible forms of remediation is to

options are not economically viable, but it is not up to you to play judge and to decide which remedy should be completed. Your job is to provide all forms of repair and then let the parties determine the outcome.

Be careful about what you suggest and be thorough and correct with your reply. Becoming certified helps, but continuing to take available courses will help to keep your skills sharp and up-to-date. ■

Drew Kern of Infinity Claims Management Solutions in Milton, Ontario, is an NWFACP Certified Inspector. He can be reached at 905.875.3643 or drewkern@cogeco.cadrewkern@cogeco.ca.

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“What would you consider to be the acceptable maximum board replacement in an existing wood floor?”

JOHN ALFORD

There are a couple of things I consider when I am replacing boards in an existing floor, whether it is due to water damage or just adding on to an existing floor. First, is how gapped out the existing floor is; sometimes it's better to replace an entire room if you are going to have to spend too much time trying to gap the new floor to match the existing floor. If you are lacing/tooth-in, the number of rows that are affected compared to the unaffected rows can determine whether or not you should tear a room out and start over. Usually, if I am even close to 50 percent of a room being taken out, I will just replace the floor. For me it's all about time on the job. More often than not, my time is more valuable than the material cost on a room replacement.

JON NAMBA

Is there a definitive number? Not really. Our company has done board replacements from one to more than 200. It's really about what the involved parties are willing to agree upon and if the installer has the qualifications to do an acceptable job. If the manufacturer, the end user, and the installer can all agree, then a negative experience can have a positive outcome. Is there money involved? Sure there is, and that's where all the involved parties need to see where the responsibility will be placed.

MATT THRANE

It is almost impossible to give an acceptable amount of boards that should be replaced in a floor. First, you would need to consider the cost to repair as compared to the cost to replace the entire floor. The individual board repair cost includes man hours, labor costs, and materials. Individual board replacement can end up costing a lot of money. Other factors include the size of the job as compared to how many boards would need to be replaced. For example 20 to 30 boards in a 2,000-square-foot floor is no big deal. However, 20 to 30 boards in a 200-square-foot floor is a much higher

percentage of boards being replaced. Depending on the installation method of the flooring, the number of boards being replaced could, at some point, affect the structural integrity of the floor. It's also important to look at whether the floor is factory finished, or site finished. A site-finished floor may require color and finish matching or a complete refinish of the entire floor. Lastly, if board replacement is due to damage, the repair is pretty easy to address, but if the replacement simply is due to the customer not liking the colors of individual boards, replacement can become an arguable point.



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THINK SAFETY!

The hidden dangers of improper respirator use

It is known widely that precautions must be taken to avoid inhalation of airborne particles produced by cutting and sanding. Breathing these particles may cause allergic respiratory symptoms, mucosal and non-allergic respiratory symptoms, and even cancer.

“The most common cancer associated with the wood industry is sinonasal carcinoma. While rare, there is a pretty strong association with exposure to wood dust. Any exposure to wood dust increases your risk,” explains Dr. Karl Studtmann, an otolaryngologist practicing in Jackson, Tennessee. “You’re not going to know you’ve been exposed to it because you will not have symptoms right away. It’s more of a delayed reaction that can happen years and years after you’ve been exposed.”

One of the problems with sinus cancer is that it is hidden. It’s not like skin cancer where you more-easily can notice that something is wrong.

“It’s very difficult to diagnose sinus cancer. Oftentimes, it will present as a sinus infection or a recurrent sinus infection. You will have pressure, you might have a headache, nasal drainage, and those are things that you’d expect from a sinus infection,” says Studtmann.

In addition to cancer, multiple diseases can occur due to exposure to irritants, such as wood dust particles.

“Other common ailments we see include nasal polyps and chronic sinusitis, so it’s imperative that you limit your exposure to the extent that you can by wearing a mask or respirator,” says Studtmann.

“It’s important to remember that there are all sizes of particles in the air. Some of them are larger and get filtered out by your nose hairs, but other ones are so small that they get into the nasal cavity. Some of them are so small you wouldn’t even notice if you were walking around on the job site. The wood dust that you see on the floor isn’t necessarily the problem. It’s the tiny particulate that’s in the air,” explains Studtmann.

If you are experiencing symptoms, Dr. Studtmann advises first seeking treatment from your primary care doctor. It might just be a simple sinus infection.

However, if you have persistent or recurrent symptoms, it would be worthwhile seeing an ear, nose, and throat (ENT) doctor. Initially, they likely will treat it as an infection, but then subsequently, they will proceed to things like a CAT scan so they can better diagnose the problem.

“The most important thing is that if you have recurrent symptoms, you need to get them checked. Don’t just write it off as a simple sinus infection,” says Studtmann.





While the NWFA has long stressed the proper use of a disposable particulate respirator to minimize the effects of airborne particulates, not everyone takes these warnings as seriously as they should. Many believe that it will not happen to them. Such was the case for Wayne Lee of Middle Tennessee Lumber Co.

“For 31 years, my sinuses have been sucking dust coming out of machines. I started in 1985 as a service technician. Someone would bring in an edger or a buffer, and I would take an air compressor to it and blow the wood dust out of it. I did that for years, but I never thought that the dust could hurt me,” recalls Lee. “Later, I got into floor sanding, but even then, I did not wear proper protection. I didn’t think that it could hurt me, but it did.”

Lee says he now deeply regrets his nonchalant attitude towards on-the-job safety, which developed at the very early stages of his career in the wood flooring industry.

“When you’re installing wood floors and using the chop saws and table saws, it appears to be producing heavy dust, so you really don’t think about it. However, there is also fine dust going into your sinuses. It’s easy to rationalize to yourself that you don’t need a mask because you’re not really ‘sanding,’ but rather ‘installing,’ and that is what can cause you to ignore the very real dangers,” explains Lee.

As years went by working around wood dust, he began to experience issues breathing. It was something that he tried his best to ignore.

“About five years ago, I noticed difficulty breathing through my nose. I ignored it, but I found myself



Wayne Lee

becoming more of a mouth breather. As time went on, I also noticed that I was not sleeping well,” explains Lee.

“I did a sleep apnea test, and the results came back that I did

not have sleep apnea, but rather I was not getting enough oxygen. I was told that doctors get concerned when the oxygen levels get below 65 percent. I was at 50 percent, so clearly something was wrong.”

As a result of his unexplained oxygen deficiency, Lee was instructed to visit an ENT specialist.

“I also was given a machine called a condenser that I still use. To this day, I sleep with it every night, and it helps me to get more oxygen into my body,” says Lee.

Unfortunately for Lee, he put off going to the ENT – a decision he would soon regret.

“Once I had the condenser machine, I made the mistake of putting off going to the ENT, but my condition worsened to the point where I could almost not breathe out of my nose at all. I knew that something was not right. It was then that I made the visit to the doctor,” says Lee.

A CAT scan soon revealed a large percentage of Lee’s sinus cavity was blocked.

“We learned my sinuses were mostly blocked, and due to breaking my nose when I was younger, I also had a deviated septum. That was restricting airflow even further,” says Lee. “I asked the doctor if the blockage was the result of sanding floors. He said that while

he couldn’t say for sure, he stressed that certainly didn’t help. I personally believe it was the years and years of just being silly and not wearing the proper protection. As a result of the issues I was having, I ended up having to have surgery.”

Lee stresses that such a surgery is something that no one would want to endure.

“The doctor was up in my nose for an hour and a half, grinding, cutting, chopping, vacuuming, widening, and breaking my nose. Recovery from the procedure was the worst pain I have ever had in my life. It was very uncomfortable,” says Lee.

Post-recovery, Lee says the results of the surgery were life-altering.

“I notice that I can smell things now. Yesterday, I was at a stoplight, and I could smell the cigarette from the car next to me. I would never have smelled that a year ago. I go to church, and I can smell people’s perfumes and cologne. It’s crazy the difference the surgery has made. I just wish it was something that I could have avoided by wearing proper safety equipment,” says Lee.

“If I could somehow go back in time and talk to my younger self, I would tell myself that it’s your body, and you have to take care of it. If there is a safety caution, don’t ignore it. In 30 years, no one is going to care how hard you worked, how many square feet of floor you sanded; you’re the one that is going to have to pay the price for your health, your doctors, and your medical bills. Be smart and be safe.” ■

Burt Bollinger is Editor of Hardwood Floors magazine. He can be reached at burt.bollinger@nwfa.org or 800.422.4556.



Callitris glauca

The Callitris glauca genus contains about 15 species. Callitris trees are found to grow only in Australia (primarily in New South Wales and Queensland) and in New Caledonia with 13 of the 15 species found in Australia. This species is readily available.



USES:

Some species of callitris are durable, insect-resistant wood. It commonly is used for flooring, siding, interior joinery and cabinets, furniture, decorative veneers, and fencing poles and posts.

COLOR:

The heartwood can be a honey-gold to brown with dark brown longitudinal streaks and darker knots throughout. The sapwood varies from pale straw to pinkish tan.

GRAIN:

The grain usually is straight; texture rather fine; lustrous; aromatic camphor-like odor; greasy feel; many tight, small, dark brown knots throughout.

HARDNESS (JANKA):

Averages 1375

DIMENSIONAL STABILITY:

Excellent - Australian Cypress has a dimensional stability factor of 2.1 percent (radial) and 2.8 percent (tangential), meaning this species may shrink/swell up to 2.8 percent of its given width, depending on how it's cut, when going from green (30 percent MC) to oven-dried.

DIMENSIONAL CHANGE COEFFICIENT:

Average = .00162 (tangential)

SPECIFIC GRAVITY:

Average = .58

NAILING:

Very hard and brittle. It has a tendency to fracture and split easily when nailing. The air compressor psi will need to be reduced to avoid tongue splitting. Use of 18 gauge cleats work best when nailing Australian Cypress.

SANDING:

Australian Cypress sands very easily. Follow the standard grit progression sequence. The high resin and sap content found in Australian Cypress can clog paper easily. The knots are extremely hard and must be addressed during the sanding process. Failure to isolate the knots during sanding may result in a wavy appearance. The final pass using a multi-head or oscillating sander normally is done with a higher grit abrasive than with other species. Australian Cypress stains and finishes very nicely, but the resins and saps can affect finish dry times and adhesion. It is normally recommended to seal each floor, room by room to minimize sap bleedback from affecting the coating.

SUSTAINABILITY:

Australian Cypress is not listed in the CITES appendices and is reported by the IUCN (International Union for Conservation of Nature and Natural Resources) as being a species of least concern.

INTERESTING NOTES:

- Although this tree is sometimes called by the name White Cypress Pine, it's technically not a true pine genus. It is included within the broader Cupressaceae family, which includes several genera that encompass the more general term "cypress."



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- This Australian softwood species is one of the hardest conifers in the world, rivaling some species of Yew (*Taxus* spp.) found in the Northern Hemisphere.
- The tree varies in size according to soil and climate conditions; on suitable sites, it may reach a height of 100' with diameters around 16"-24".
- The name callitris is derived from the Greek words kallos (beauty) and treis (three) and refers to the arrangement of leaflets in whorls of three.
- Resins from callitris trees traditionally have been used by Indigenous Australians as an adhesive for attaching axe heads to handles, and barbs and tips to spears. ■

Sources: Australian Government; Department of Agriculture (ABARES) WOOD!; Copyright © 2016, Eric Meier Wood Identification and Use; Copyright © 2006, Terry Porter

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HARDWOOD HINTS

By Jason Elquest | Owner, Blackhawk Floors Inc.



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"This was the problem solver!" Maximilian Messner is a joiner and floorer based in Fridolfing, Germany. His family's firm, Schreinerei Messner, combines the modern and traditional in their tools, techniques and designs. "In this company, we use traditional woodworking tools alongside high-tech machines like Shaper Origin." For a recent medallion installation, Maximilian had a mosaic idea in his head, but he wasn't sure what the most efficient solution would be.

SHAPER ORIGIN WAS THE PROBLEM SOLVER

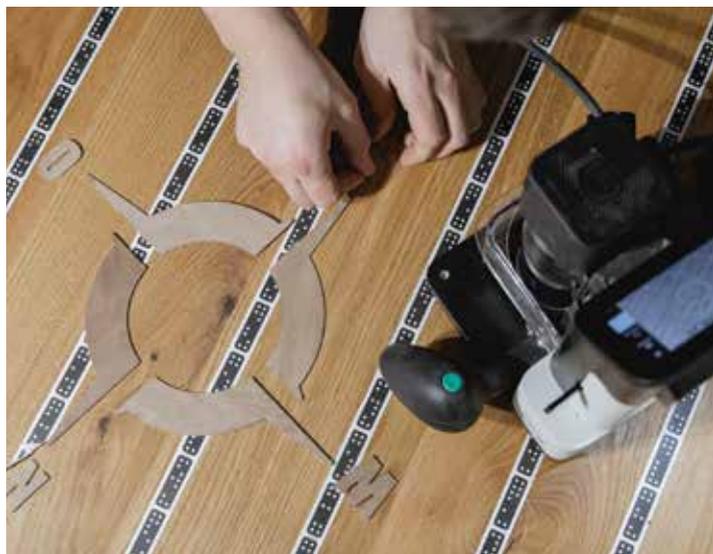
When he first saw a video of Origin in action, he says, "It just clicked. That was the problem solver! You can do this project with Origin." Working on a landing, space was limited. However, there was more than enough room for Maximilian to create a scan of the area where he wanted to cut and virtually 'place' his design exactly where he wanted it. Using the same cut file for both the negative and the positive pieces of his inlay, he quickly pocketed out the area he needed, and then used the easy on-tool offsets to creep up on a perfect fit for his inlay.

Portability in a CNC is a game changer

Now, Origin makes regular appearances with Maximilian, both in the Schreinerei Messner shop and on jobsites. When customers see him with Origin, they're always intrigued. "They ask 'what is that?' They can't believe that such a small machine has such a wide range of applications." For Maximilian, the tool's

Watch Origin
in action on YouTube.





portability goes hand-in-hand with its versatility. “The main problem facing modern factories is space,” Maximilian says. “Origin is small and you can take it to your site, which I think is really cool.” This makes it easy to work on installed pieces and a natural fit whenever a patching job is required on a finished floor.

No programming necessary

Maximilian started his career using advanced CNC machines, so he wasn't worried about the learning curve involved when learning to design for Origin. “In my previous job, I was programming five-axis [CNC] machines.” But Origin's intuitive design placement was a breath of fresh air after the rigors of programming with g-code. “Working with Origin is easy.

If you get an idea, you just make a quick drawing on your PC, and then send it directly to the machine and just start cutting.”

An insurance policy for every job

Because the tool is so accessible, it's a natural fit to introduce apprentices and newer employees to CNC cutting. “It's hard to find workers” in Germany, Maximilian says. And a large CNC can represent an intimidating learning curve to a lot of new hires. “When I first started, it was my dream to work with a big CNC,” says Maximilian. “But it's very hard to program. Now, if I say [to an apprentice], ‘go make this with Origin,’ I don't have to worry.”

He doesn't think of Origin as a replacement for traditional hand tools and techniques, any more than it's a replacement for a full scale, static CNC. Instead, it's another tool that he can use whenever a project calls for it. It's also a tool that fills a lot of roles at Schreinerei Messner: a problem-solving tool; a way to save on his shop's footprint; a jobsite CNC machine; an introduction to CNC technology; and an insurance policy that guarantees, as Maximilian says, “that every job will be done to the millimeter.” ■



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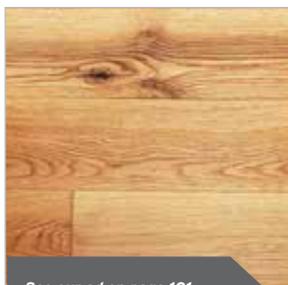


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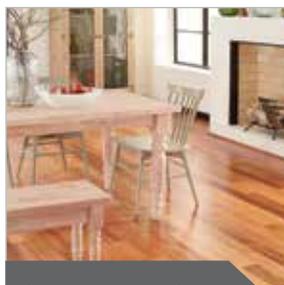


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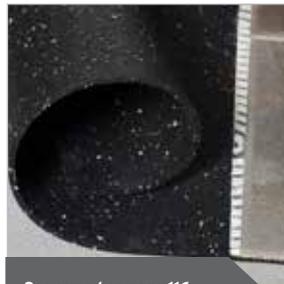
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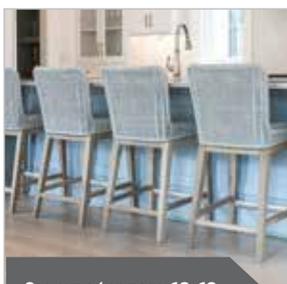
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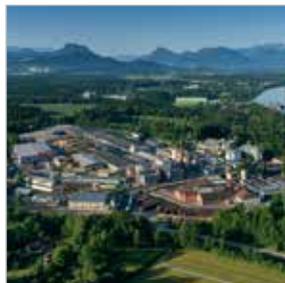
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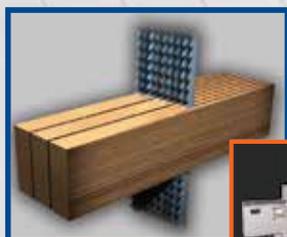
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IIC	5/8" Suspended Gypsum	69 dB	70 dB	62 dB
	No Suspended Ceiling	49 dB	50 dB	49 dB
Δ IIC	No Suspended Ceiling	21 dB	21 dB	21 dB
STC	5/8" Suspended Gypsum	66 dB	67 dB	61 dB
	No Suspended Ceiling	50 dB	51 dB	52 dB

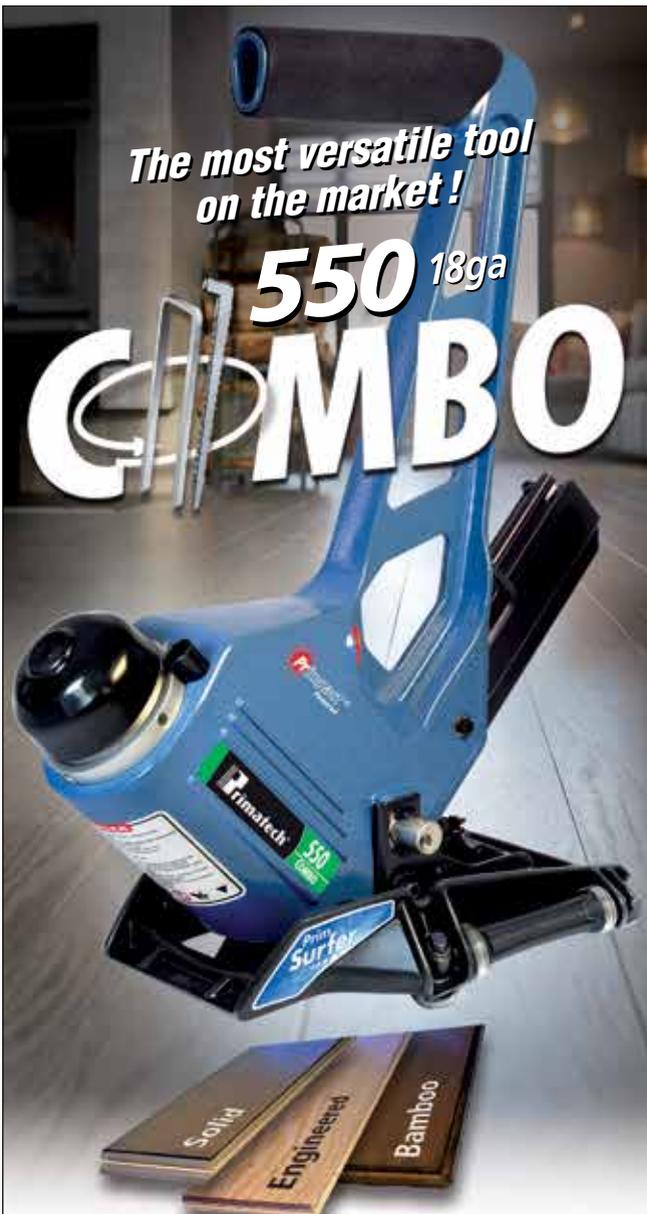
* Tests were performed using 3/8" engineered hardwood bonded to 6" thick concrete
 ** Test performed with 9/16" thick engineered hardwood and Bostik's Best®.

For more information, contact us at:
 1-800-726-7845 | www.bostik.com/us



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 3/4" (19mm) factory set
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www.primattech.ca



See our ad on page 93.

LIGNOMAT USA

The Ligno-DuoTec BW can measure wood moisture and relative humidity, which are the main factors when it comes to moisture problems. Floor installers and inspectors can use the pinless dual-depth mode to measure wood floors, subfloors, different types of bamboo floors and concrete floors with the built-in reference scale. To convert the instrument in an accurate thermo-hygrometer, add RH probe and instantly read relative humidity, temperature, Dew Point, and GPP.

lignomatusa.com

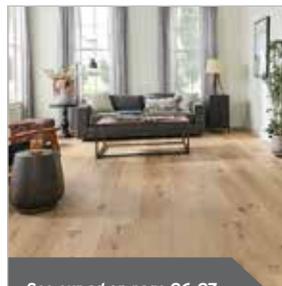


See our ad on page 100.

LOBA-WAKOL LLC

WAKOL MS 262 Wood Flooring Adhesive has been developed for use with most standard applicators and is designed to allow easy squeeze out, and unwanted dripping has been eliminated. WAKOL MS 262 Wood Flooring Adhesive is now available in a pail form for any vertical installation.

loba-wakol.com



See our ad on page 96-97.

MANNINGTON MILLS INC.

Introducing Sanctuary by Mannington. A European white oak that is synonymous with zen-like beauty. The massive hardwood planks come in 10" wide, with lengths up to 7 feet long, finished with an ultra-matte finish that allows the natural character to look very soft and elegant.

Simple, clean and minimal without sacrificing beauty.

mannington.com



See our ad on page 77, BC.

MAPEI CORPORATION

Ultrabond ECO* 907 is a fast-curing, 100%-solids, silane-modified polymer, moisture-curing, gun-grade adhesive designed for basic wood subfloor construction featuring:

- 2-hour cure time
- High bond strength
- Excellent elongation properties

It can be used to repair wood flooring, install wood molding and baseboards, bond wood stair nosings, and more.

mapei.us

Union Tool Engineered Flooring Equipment



The Union Tool Corporation offers a complete range of equipment for the production of engineered flooring.

Count on Union Tool for your next piece of equipment or an entire system!

- Dual-Lane Core Feeders automatically feed two stacks of plywood cores up to 12" wide. Each lane operates independently and includes its own hopper rack system.
- Hot Melt Roller Coaters apply hot melt (PUR) adhesive to the top surface of plywood core planks. You get smooth, even and controllable amounts of adhesive to each plank.
- Lay-Up Conveyors align and transport the coated planks and top lamellas to the Union Multi-Nip Rotary Laminators.
- Multi-Nip Rotary Laminators apply the necessary pressure to bond both the coated planks and the top lamellas together. We offer several styles and can meet your unique application requirements.
- Flying Cutoff Saws automatically cut laminated engineered flooring planks. These Union Flying Cutoff Saws allow continuous lamination at speeds to 60 feet per minute.
- Union Engineered Wood Flooring Systems are available for single- or dual-lane operations.

Get the whole story at www.uniontoolcorp.com



The Union Tool Corporation

www.uniontoolcorp.com

574-267-3211

E-mail: sales@uniontoolcorp.com

SPRING PRODUCT SHOWCASE



See our ad on page 35.

MAXWELL HARDWOOD FLOORING

Legacy Live is a specialty crafted Maxwell Hardwood Flooring product. It is a 5/8" unfinished engineered floor, produced from premium livesawn white oak lumber. Lengths are up to 10' with an average length of 5'. The European characteristics are a popular feature of this appearance grade floor. maxwellhardwoodflooring.com



See our ad on page 106.

MOHAWK FINISHING PRODUCTS

Mohawk Finishing Products is the leading manufacturer and distributor of professional wood touch-up, repair, and finishing products. Mohawk offers top-quality wood coatings, finishing products, cabinet polishes and cleaners, touch-up and repair products in the industry. Specializing in products for the cabinet, furniture, and flooring markets. Order online. mohawkfinishing.com



See our ad on page IBC.

NOFMA

Through the years, NOFMA standards have stood the test of time. NOFMA has been certifying hardwood flooring since 1907 and is the only standard in the industry that assures flooring has been properly kiln dried, manufactured, and graded. nwfa.org/NOFMA



See our ad on page 102.

OGDEN SALES GROUP

The Robot random length veneer feeder automatically lays veneer onto plywood continuously. The Robot picks veneer from bins containing random lengths and places the veneer onto plywood that is feeding down the conveyor. A signal is sent to the robot indicating the position of the veneer end allowing the veneers to be placed continuously. ogden-group.com



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**Reduce scrap and increase profits.
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<https://www.mohawk-finishing.com>



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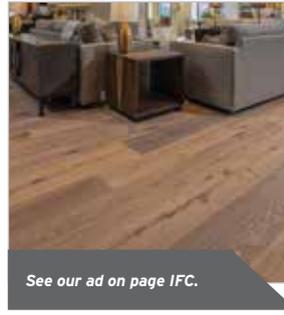


ONEIDA AIR SYSTEMS

This steel Dust Deputy cyclone with hopper and mobility cart prevents more than 98 percent of wood sanding dust from reaching your vacuum's filter, virtually eliminating clogging and prolonging filter life. Connects to your vacuum to keep it running longer between filter cleanings, minimizing disruptions and down time on the job.

oneida-air.com

See our ad on page 91, 113.



OLDE WOOD LTD.

Reed Plank

With hardwood design elements and qualities that range from contemporary to rustic, our Reed Plank flooring will be the focus of any style project or interior.

oldewoodltd.com

See our ad on page 1FC.

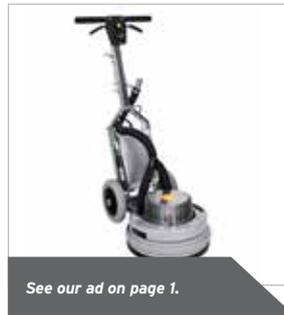


P&G SWIFFER

Swiffer WetJet Wood Spray Mop was specially designed with hardwood floors in mind to give you a great clean. The unique ultra-fine mist spray nozzles give you greater control over solution dispersal. The Quick dry solution loosens dirt and lifts it off the floor, pulling dirt and grime into the microfiber-like WetJet Wood pad and locking it away for good.

swiffer.com

See our ad on page 52-53.



PALLMANN

The PALLMANN® SPIDER is a planetary gearing, powerful drive sanding machine that ensures a perfectly sanded surface. The multi-purpose PALLMANN® SPIDER is extremely easy to use and quiet in operation. Excellent dust containment allows for easy connection to dust containment systems. Your floors will never be flat until they are SPIDER Flat!

pallmann.us

See our ad on page 1.

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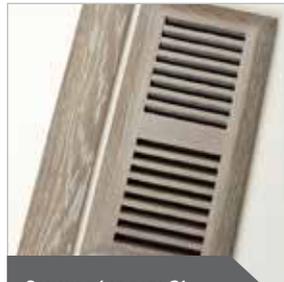


See our ad on page 104, 108.

PRIMATECH INC.

Primotech's newest innovation, Q900A The Edge. Blind nail at 45° to the last full board. Perfect for all your tight spots: hallways, railings, closets, stairs, treads around cabinets, fixtures, and fireplaces. Adjustable to install solid and engineered flooring from 1/2" to 3/4" thick. The Edge embodies the PRIMACT striking module offering reliability, extended performance, and unequalled smoothness of operation.

primotech.com



See our ad on page 21.

SENECA MILLWORK INC.

Introducing hardwood vents by Seneca. Seneca Millwork now offers a selection of standard size vents in a variety of species and finishes, both prefinished or unfinished. The prefinished vents are color-blended to Seneca's existing flooring transitions and customers' flooring. Specialty finishes and special order custom sizes are also available.

senecamillwork.com



See our ad on page 94-95.

SHAPER TOOLS

Shaper Origin brings CNC-level precision to all your flooring projects. Work onsite, at virtually any scale. No programming to learn, no complex software to master; bring precision cutting to inlays, floor patches, and more. See Shaper Origin in action at shapertools.com or at any of our 80+ retailers nationwide.

shapertools.com



See our ad on page 14-15.

SHEOGA HARDWOOD FLOORING

Sheoga is showcasing our precision milling, including our 3/4" solid and engineered flooring, available unfinished or prefinished, with smooth or textured styles. Check out our new Sheoga Live Sawn White Oak and prefinished color options!

sheogaflooring.com

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**Once You Try WOODWISE
You'll Never Use Anything Else!**

This no-wax hardwood floor cleaner is easy-to-use, biodegradable, phosphate-free, lifts the dirt without leaving a residue, dries fast, and contains no oils or waxes that attract and hold soil.

Design Hardwood Products, Inc.
Redmond, Washington



www.woodwise.com

SPRING PRODUCT SHOWCASE



See our ad on page 85.

STAUF USA

Stauf's ULC-500 Level-Seal is a two component urethane leveling compound capable of creating a moisture barrier of up to 18#s CC or 97%RH. This product offers the convenience of leveling and sealing a floor in one product, and all in one application.

staufusa.com



See our ad on page 105.

THE UNION TOOL CORPORATION

The Union Tool Corporation offers a complete material handling and coating system for laminating engineered flooring. Engineered flooring is used as an alternative to solid hardwood flooring. This engineered flooring system includes a hot melt roller coater, lay-up conveyor, and multi-nip roll machine that coats.

uniontoolcorp.com



VÄLINGE

With our innovative Woodura technology we have taken the next step and are now presenting the 3rd generation in hardwood flooring. Our real wood floors are 3x stronger than conventional hardwood floors. This means great design, worry-free, and truly durable floors built for life.

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WAGNER METERS

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wagnermeters.com



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Waterlox's new UNIVERSAL Tung Oil Sealer and H2OLOX Finishes are low odor, low VOC and provide the same superior performance, beauty and quality as all the products the family-owned company has been creating since 1910.

waterlox.com



See our ad on page 111.

WICKHAM HARDWOOD FLOORING

Introducing a new engineered floor composed of a plain sawn 4 mm hardwood toplayer on a vertical quarter sawn red pine filleted core. Wickham's new Dual Flex platform is built for uneven subfloors, providing increased stability by eliminating any possible gapping, cupping and delaminating.

wickhamhardwood.com/dualflex



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With Wintersteiger, you now can repair larger knots and cracks than before with traditional putty. The void is filled 100 percent in depth allowing for no failures, no shrinkage, and no cure time. Can be handled, stacked, or sanded immediately, and this application only takes seconds!

wintersteiger.com

The Right Wood Filler for Every Job!



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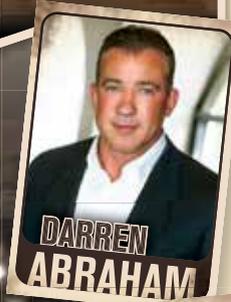
WOODWISE

WOODWISE is showcasing its extensive line of wood fillers, including WOODWISE Wood Patch, Full-Trowel Filler, Powdered Wood Filler, No Shrink Patch-Quick, Pre-Finish Filler, and Epoxy Wood Patch.

woodwise.com

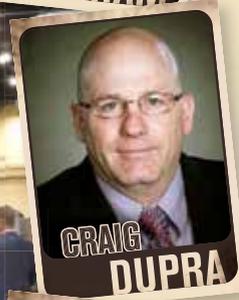
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Abraham Linc is proud to partner with Wickham Hardwood Flooring, a company that continues to create innovative products with quality craftsmanship.

– **DARREN ABRAHAM**
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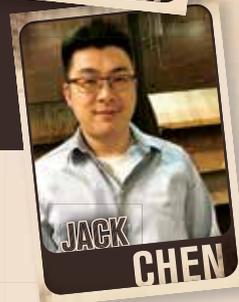
Distribution is a tough business and you really need the right partners. Wickham has been a fantastic partner for us. Great products that we can get very quickly.

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Installers Warehouse
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AKHURST

Houfek Twingo

The Houfek Twingo 600BBB 3-head Sanding/Wire Brushing Machine can be configured with wire brushes for structuring or with brush sanding heads for sanding. Each head is equipped with dual rotation and variable RPM, which can vary the sanding/structuring look to your desired result. amimachinery.com



AMERICAN SANDERS

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The American Sanders EPOCH-HD is a 230V, dual speed, adjustable weight machine with capability surpassing traditional 110V machines. Low speed is ideal for intercoat abrasion, fine finishing and polishing, and stain application. High speed with the HydraSand multi-disc head. The Epoch-HD provides superior performance for abrading and flattening floors. americansanders.com



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The Bona Power Drive® is an all-directional and versatile disc sanding system that delivers exceptional power, saves labor, and can significantly reduce your edging time by 50-80 percent. Create custom, beautiful floors using one or all of the accessories: Steel Plates, Weights, Wire Brushes, and Tynex Brushes. bona.com

See our ad on page 2, 67.



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Abrasives

Headquartered in Hebron, Kentucky, Cumi America provides the best value and performance in flooring abrasives on the market. Our manufactured sandpapers, discs, pads, and screens ensure an excellent finish while maximizing labor and material costs. Orders are shipped the same day from our Kentucky warehouse. cumiusa.com



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ROTEX RO 150

The ROTEX RO 150 with 3-in-1 action – for coarse sanding, fine sanding, and polishing. One tool for an extremely high material-removal rate during coarse sanding. A super-fine result when fine sanding and a perfect finish when polishing. Perfect for the hard-to-reach areas or following an edge sander. festoolusa.com

Abrasives & Sanding Equipment



See our ad on page 114.

GALAXY MACHINES

Seirios

We reached further into the Galaxy to bring you the ingenious Seirios Belt Sander. The innovative and unique features, which are only available on the Seirios Sander, have increased the head cutting pressure by 15-20 percent without increasing overall weight. A flatter finish and increased cutting speed is achieved.
galaxymachines.com



LÄGLER

Paddle System Handle for the Lägler HUMMEL®

The classic among belt sanding machines is now equipped with a newly-developed paddle system handle. The ergonomic paddle lever, together with an adjustable quick lift plate and a larger ball-head, ensure a completely new sanding experience. This system now also allows secure fixing and significantly faster separation of the upper and lower parts of the rod. It is possible to retrofit either the entire system or just the paddle lever.
laglernorthamerica.com



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mirka.com



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nortonfloorsanding.com

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ONEIDA

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The patented Oneida Vortex DCS is a portable floor sanding dust containment system that installs onto nearly any make/model floor sander, converting it into a truly dust-free machine that tests 15x cleaner than traditional cloth bag systems. Its unique design eliminates the need for plastic sheeting and vacuuming after sanding.
oneida-air.com

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INTRODUCING THE NEW GALAXY SEIRIOS

We reached further into the Galaxy to bring you the ingenious Seirios Belt Sander.

The innovative and unique features which are only available on the Seirios Sander have increased the head cutting pressure by 15-20% without increasing overall weight.

A flatter finish and increased cutting speed is achieved.

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Onfloor's Pro 16 is a multi-surface planetary sanding machine equipped with Onfloor's patented triple-belt technology. With variable speed control, the platform quickly abrades through varnish/sealer, mastic, and more to expose the bare wood surface and easily refine that surface in preparation for stain and seal.

onfloor.com



PALLMANN

SPIDER

The PALLMANN® SPIDER is a planetary gearing, powerful drive sanding machine that ensures a perfectly sanded surface. The multi-purpose PALLMANN® SPIDER is extremely easy-to-use and quiet in operation. Excellent dust containment allows for easy connection to dust containment systems.

pallmann.us

See our ad on page 1.



STANZA MACHINERY

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Stanza Wire Brush Machines are available in a variety of widths, stations, and wire brushes to accomplish many different looks and distressed appearances. Heavy-duty motors ensure max performance in wire brushing and denib sanding prior to finishing. Stanza is located in Charlotte, NC, with a full demonstration lab.

stanzamachinery.com

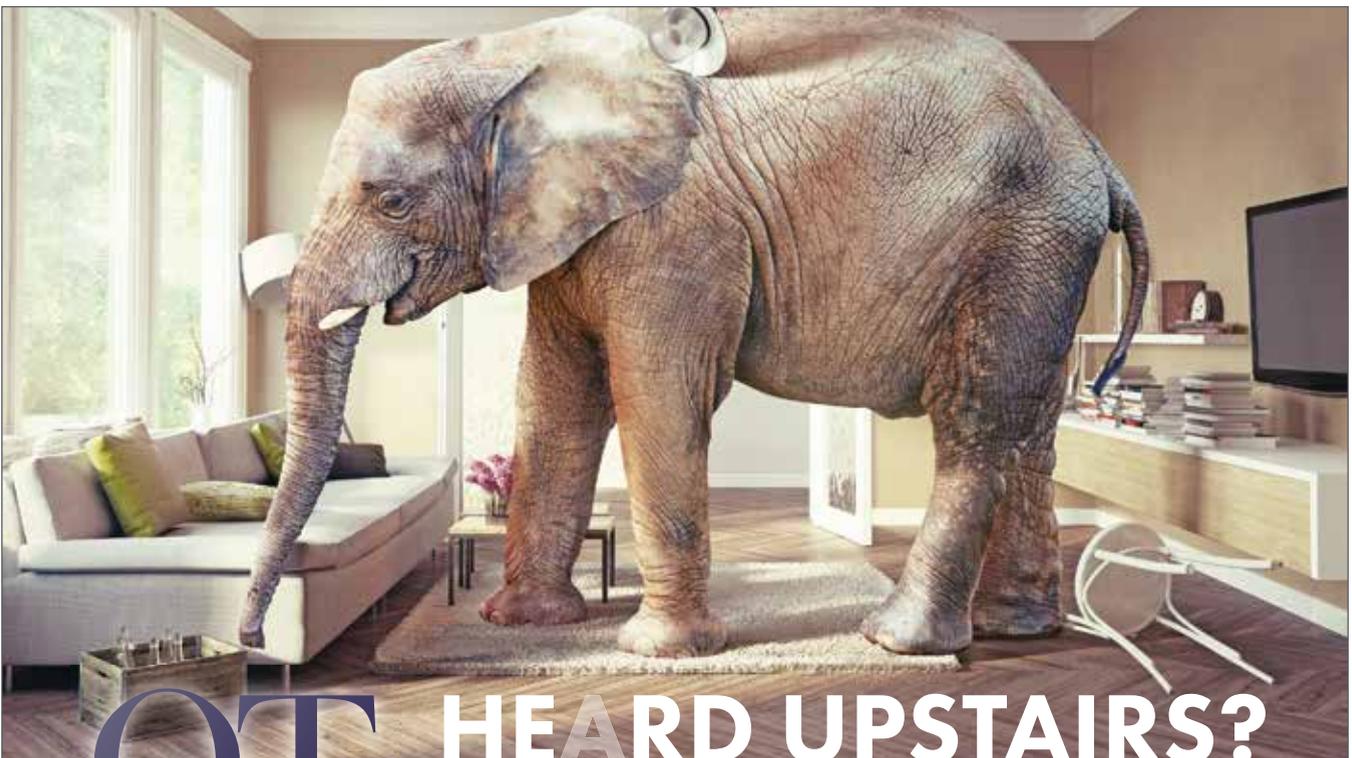


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MIRAGE

New DreamVille and Escape Collections

Named after some of small-town America's dreamiest towns, the DreamVille Collection is offered in a muted brushed Oak and an engraved Maple with variations in color and texture for a distinctive look. The Escape Collection has a textured surface, giving them a natural and distinctive look that masks nicks and other signs of wear. miragefloors.com



MULLICAN HARDWOOD FLOORING

New Engineered Flooring Lines

Mullican Hardwood Flooring is introducing three new engineered flooring collections: Parkmore, Madison Square, and Revival. These new lines will expand and compliment the wide variety of their existing products, which are available exclusively through the company's distribution partners. mullicanflooring.com



PROTEAM®

GoFree® Flex Pro II

The ProTeam® GoFree® Flex Pro II cordless backpack vacuum has a new motor, new runtimes, and lighter weight. The GoFree Flex Pro II cleans 30 percent faster than a standard backpack vacuum and 5 times faster than an upright vacuum. A more efficient motor makes the unit lighter than ever at 17.5 pounds or 15.5 pounds depending on battery choice. proteam.emerson.com



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UNIVERSAL Tung Oil Sealer is a universal sealer that can be used as the base coat for the existing ORIGINAL, MARINE, and URETHANE Waterlox finishes, as well as the new H2OLOX finishes. H2OLOX Gloss, Semi-Gloss, Satin, and Matte are a new family of finishes that are emulsion-based with less solvents, making them low odor and eco-friendly. waterlox.com



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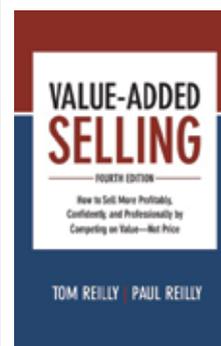


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"As a luxury product, wood flooring is actually going to become even more of a value-added category. To be able to deliver, you're really going to have to take your game to another level. If you're going to have success, you are going to have to make sure that you match your presentation to the customer, both in terms of physical appearance and how you present your company."

- **Craig Dupra of Installers Warehouse,**
NWFA Real Answers Podcast - Episode 4 -
Positioning Your Business for the Future

"Don't always delegate the 'not fun' jobs. When it's clean up time, you're still there cleaning up. If I am doing a night project, I am almost always going there to be at the job with them. I may not stay the whole time, but I am at least going to get them started, bring them dinner, and make sure they are happy...they need to know they are supported."

- **Jason Elquest of Blackhawk Floors Inc.**
NWFA Wood Talk -
Conversation with
NWFA Regional
Instructor
Jason Elquest



"This is a great opportunity for you to figure out how you can gain share and improve. If you have people who are operating remotely, how do you use that to create a better customer experience? All of those things that you never had time to do, well, you have more time that you used to. You can also keep an eye on your competitors, and think about how you can gain share. Coming out the other end, you might be stronger than you were on the way in."

- **Bruce Zwicker of Zwicker Advisory**
NWFA Real Answers Podcast
Maintaining Hope and Flexibility During a Crisis

"It's going to get a lot more personal. I think companies need to focus on the idea that when you

walk into a house, you're going to be dropping floor protection sooner. If you never put floor protection down in the past, it's time to take those steps to show those customers that you're keeping everything neat, and clean, and tidy. It's going to be paramount on everyone's mind."

- **Chris Zizza of C&R Flooring**
NWFA Real Answers Podcast
Developing Your Coronavirus Gameplan

AD INDEX

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Aacer	7
Allegheny Mountain Hardwood Flooring.....	101
Amaz Floors.....	19
Arboritec	65
Basic Coatings	31
Bona	2, 67
Bostik Inc.....	103
Canlak	87
Danzer Services.....	93
Delmhorst Instrument Co.	99
EF Floors & Design	117
FCICA	79
Fishman Flooring Solutions	29
Floor & Decor.....	83, 92
FP Floorprotector GMBH.....	23
Galaxy Machines.....	114
Graf Custom Hardwood.....	68-69
Lignomat.....	93
Loba-Wakol	100
MAPEI.....	77, BC
Mannington Mills.....	96-97
Maxwell Hardwood Flooring	35
Mohawk Finishing Products	106
MP Global.....	107
NOFMA	IBC
Norton Abrasives	115
NWFA.....	61
Ogden Sales Group	102
Olde Wood Ltd.	IFC
Oneida Air Systems.....	91, 113
P&G Swiffer	52-53
Pallmann	1
Primatech	104, 108
QT Sound Insulation.....	116
Reilly Sales Training.....	117
RPP	39
Seneca Millwork.....	21
Shaper Tools	94-95
Sheoga Hardwood Flooring	14-15
Stauf USA.....	85
Union Tool Corporation	105
Valentus Specialty Chemicals.....	50-51
Wickham	111
WOODWISE	5, 109

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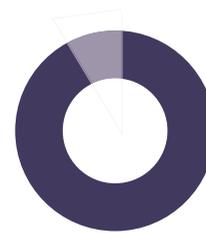
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TOUGH DECISIONS

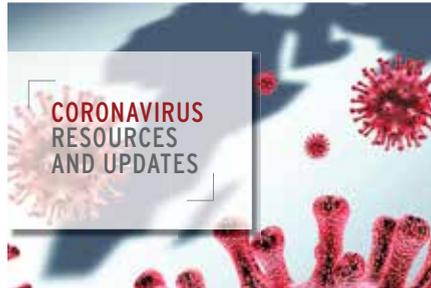
I've waited until the last possible moment to write this column – not because I'm a procrastinator, but rather because I had hoped that the last possible moment might provide more clarity than the days preceding it – I was hopefully waiting for a day that would hold certainty along with clear solutions for us as individuals, as communities, as an industry, and as a society.

After all, isn't that what we're all searching for? Certainty?

Certainty that there will be a future – a sense that tomorrow may be better than today, or last week, or last year. We want the certainty that we will wake up with jobs. Our families will be secure. Our dreams will be safe.

The reality is we always are living in uncertainty, and something like a pandemic brings that to light, not only for individuals but also for societies, governments, businesses, organizations, and families. As I write this, all we know for certain today is that we live in an uncertain time, and tough decisions lie ahead.

Some decisions in this pandemic have been made for us: shelter-in-place; wear masks; schools closed; social distancing; and don't dine-in at restaurants. While these individual decisions are gone for the time being, our long-term business decisions are not. For many of us, business decisions also have ramifications for our families, friends, employees, and co-workers.



The NWFA leadership recently had to make the tough decision to cancel what we consider to be the industry's annual family reunion, the NWFA Expo. While the Expo provides the NWFA the revenues to pay for many other services throughout the year, the toughest part of this decision was eliminating our ability to network and learn from each other in person.

We will miss being together with you in Milwaukee this April, but along with every crisis comes opportunity. And the new opportunities we are working on for you to network and get education in place of this year's Expo will shape our future for years to come. It will be extra special when we do get to see each other in person at the next Expo in Baltimore on April 28-30, 2021.

When Expo was canceled, we went into crisis mode to create a new resource through this magazine, by eliminating half of the content that revolved around Expo and replacing it with content specific to the COVID-19 situation nearly overnight. I'd like to extend a

By Michael Martin
President & CEO, NWFA



huge thank you to our advertisers for sticking with us through these changes.

We produced an online COVID-19 resource center on hardwoodfloorsmag.com to make it easy for our industry to find relevant news, event cancellations, and helpful information about everything from stay-at-home orders to small business loans.

We began moving our education and tradeshow experiences from in-person to online through NWFA University and creating new online experiences. It's key for our manufacturers to be able to share their latest product roll-outs and innovations with you – our NWFA distributors, retailers, and contractors – and now we will do that through webinars, online courses, and other forms of meetings.

We also are providing tips from experts in the industry to help your business survive through our "Real Answers" podcast, which is now produced daily and is focused on topics related to the pandemic. These conversations provide breaking news and advice, as well as updates from our members in the field to share with the industry.

We know the decisions you're dealing with – laying off employees, deciding what environments are safe to work in, facing challenges getting supplies. We are, as an industry, all in the same boat now. I'm proud of what your association has done so far. As we recover, work through the stimulus opportunities, and build our businesses and society again, we will continue to be there for you.

To find resources from NWFA University,
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