

ENGINEERED WOOD

Journal

SPRING 2018



MOVING UP

Renovated APA Lab Will Accommodate Taller Assemblies

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INDUSTRY OPTIMISM

Annual Survey Shows Members Hopeful for Continued Recovery

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Volume 21, No. 1, Spring 2018

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About the Cover:
The APA Tacoma Research Center at APA's headquarters is getting its first major renovation since it was built in 1969. The \$4.5 million project will offer more space for testing of full-scale assemblies. Story on page 12.



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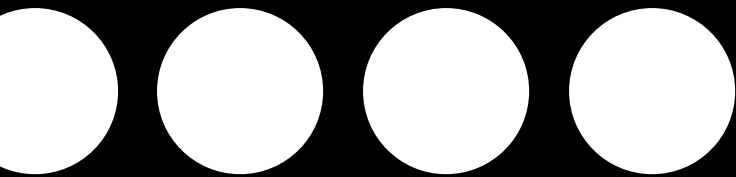
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PRIME *lines*

In this issue...

Over the years, APA has published hundreds of technical reports and publications that guide designers and contractors toward the most cost-efficient, structurally sound and aesthetically pleasing ways to execute a project. These publications discuss various types and behaviors of sheathing and exterior siding, the strength of an engineered wood product needed for a project, the shear strength of structural glulam beams, and dozens of other engineered wood-related construction issues.

But have you ever wondered where this detailed data comes from?

Most of these robust studies – many of them the result of multiple years of research – are performed at APA's research laboratory in Tacoma, Wash. The facility at APA's headquarters campus has been evaluating the performance of wood structural panels, glulam, I-joists, structural composite lumber and, more recently, cross-laminated timber, since it opened in 1969. After nearly 50 years of such activities, the lab is receiving a substantial makeover.

The APA Board of Trustees approved a \$4.5 million expansion that will address the demand to evaluate full-scale structural assemblies and testing. Currently, because space is tight and the height of the lab is limited, shearwalls over 10 ft tall often have to be tested horizontally instead of vertically. The renovation will solve that problem by bumping the ceiling height in the renovated portion of the lab to 40 ft, allowing for vertical testing of walls up to 35 ft tall. The project will also include the purchase of new equipment.

Aside from a 5,000 sq ft addition built adjacent to the lab in 2006, the overhaul will be the first time the lab's physical structure will be altered. Read more about the project, which kicks off this summer, on page 12.

Industry Outlook

The *Journal* checks in with members each year with its annual Business Outlook Survey. Members weigh in on employment, business projections and overall optimism. See what they have to say about the wood products industry – and compare responses to previous years – starting on page 20.

Also check out photos from last fall's APA Annual Meeting and EWTA Info Fair in Huntington Beach, Calif., and mark your calendar for this year's event in San Antonio, Texas, Oct. 27-29.



Sheila Cain
Editor, *The Engineered Wood Journal*
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APA Past President Receives Bronson J. Lewis Award

Past APA President Dennis Hardman was the 2017 recipient of the Bronson J. Lewis Award at APA's Annual Meeting in Huntington Beach, Calif., Oct. 28-30. The award recognizes individuals for their leadership and outstanding contribution to the engineered wood industry. It is dedicated to the late Bronson Lewis, who served for 24 years as secretary and then executive vice president of APA.

Hardman is recognized for his many contributions to the industry and his leadership of APA. His long career with APA began in 1981 as advertising and public relations manager, soon followed by his appointment to director of the association's Information Services Division (now Marketing Communications) in 1984 and vice president of marketing in 1992. From 2005 until his retirement in 2013, he served as president and worked with the Board of Trustees, making difficult decisions that would ultimately allow the association to survive and



Photo courtesy of APA

APA Chairman of the Board Jim Baskerville congratulates Dennis Hardman (with wife Kathy) for winning the Bronson J. Lewis Award at the APA Annual Meeting last October.

rebound from the crushing recession. Hardman spent the first 13 years of his career in advertising and sales promotion

with Weyerhaeuser Company. He holds a journalism degree from the University of Oregon.

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APA Publishes New Energy Guide

A new guide published by APA describes how builders can cost-effectively meet energy code requirements by value-engineering energy efficiency for a whole-home system. Viewing the home as a system means getting more bang for the buck by allocating construction dollars for value, trading out higher-cost energy-efficiency assemblies where they are not necessary.

The guide helps builders identify the energy impacts of certain assemblies and systems so they can engage with their energy rater to get the greatest return for their dollar as they seek to cost-effectively increase energy efficiency. Alternative methods, or “paths,” for energy code compliance are identified in the guide, Performance Path to Energy Code Compliance, Form R505A. The guide is available for free download from the APA website. Visit www.apawood.org and click on the Energy Efficiency link under the Design & Build tab.

American Wood Council Elects Ford as Chairman

The American Wood Council recently announced the election of Allyn Ford, CEO of APA member company Roseburg Forest Products, as the council’s chairman for a one-year term. Ford retired from the APA Board of Trustees in 2016 after 10 years of service. Danny White, a director of T.R. Miller Company, was elected first vice-chair and Neil Sherman, executive vice-president of siding at LP, was elected second vice-chairman.

LP Acquires International Barrier Technology

Louisiana-Pacific Corp. announced recently that it will acquire Watkins, Minn.-based International Barrier Technology Inc. for \$22 million. Barrier manufactures the fire-retardant coating used in LP FlameBlock fire rated products.

APA Welcomes New Staff To Field Services Division

APA recently welcomed two new representatives to its Field Services Division.

In Memoriam

Thomas R. Flint

Thomas R. Flint, former APA vice-president for standards and regulations, died Oct. 6, 2017, at the age of 86.

Mr. Flint spent 36 years at APA before retiring in 1994. He joined APA’s Technical Services Division in 1958 and was named assistant director for building codes and standards in 1962. He was promoted to director of the Technical Services Division in 1965 and was promoted again by the Board of Trustees to the level of vice president. Mr. Flint assumed the title of vice president for standards and regulations in 1992.



Thomas R. Flint

Mr. Flint held a bachelor’s degree in civil engineering from the University of Colorado and a master’s degree in structural engineering from the University of Washington. He was active in a number of professional organizations throughout his career, including the American Society of Testing and Materials, American Association for Laboratory Accreditation, the U.S./Canadian Binational Committee, and others. He also played a role over the years in helping to obtain more favorable terms of entry for U.S. structural panels and other engineered wood products in Japan.

A native of Pocatello, Idaho, Mr. Flint spent much of his retirement in Ketchum, Idaho, skiing on Bald Mountain. He is survived by his wife, Sally, three daughters, four grandchildren, and three great-grandchildren.

John Blackburn

John Blackburn, 62, Quality Control Coordinator at the Potlatch plywood mill in St. Maries, Idaho, died at his home on December 13, 2017.

Mr. Blackburn started working for Potlatch after graduating from high school and was with the company for 44 years. He obtained a bachelor’s degree in accounting from the University of Idaho. Mr. Blackburn served on APA’s Quality Advisory Committee and was a member of the PS 1 Standing Committee, which oversees the Voluntary Product Standard for Structural Plywood.

A Celebration of Life gathering was held January 20 in St. Maries.

Daniel Brown

Daniel Brown, 90, died November 15, 2017 in Tacoma, Wash. He was a senior engineer in APA’s Technical Services Division, with a career spanning from 1956 to his retirement in 1987.

Ron Nuttall is a new engineered wood specialist in the Denver Field Services territory. Nuttall studied marketing at Texas Tech University before beginning his wood products career working in wholesale distribution in Houston. Prior to relocating to Denver in 1996, he held sales positions in the plywood industry. Since that time, he has promoted the use of I-joists and engineered wood products to builders and designers in the Colorado market. Nuttall has provided initial support for the APA Fire Task Group’s work in Colorado. In addition to Denver, he also covers Kansas City and the Twin Cities.

Stephanie Thomas-Rees joined APA’s Field Services Division in December and will cover the Florida territory. Thomas-Rees has a Bachelor’s degree in Architectural Design from Clemson University and a Master’s degree in Energy Efficient Building from Oxford Brookes University. She has worked as a designer, an energy professional, and an adjunct professor teaching sustainable design and building materials. She brings technical knowledge, industry contacts, and public speaking skills to her new position with APA.

TWO FOR ONE

FPS Convention Held with
Renewable Materials Conference



The Forest Products Society has announced the plenary speakers for its 72nd Annual International Convention held June 11-14 in Madison, Wis. The meeting will be co-located with the 2018 International Conference on Nanotechnology for Renewable Materials.

The joint keynote speaker is Alper Kiziltis, research scientist in sustainable biomaterials and plastics with Ford Motor. He will address how the auto industry is developing natural fiber reinforced plastics and polymer resins made from renewable feed stocks to replace petroleum-based components.

Additional plenary speakers will address the housing market and current dynamics of the forest bioeconomy. Matthew Rooney, director, economic growth at the George W. Bush Institute, will discuss “NAFTA: The Stakes for Globalization and American Leadership.”

As a bonus, all attendees at the convention can take in any of the technical sessions at the renewable materials conference, which will offer more than 140 presentations on production characterization, applications and functionalization of renewable nanomaterials. There will also be joint receptions, a trade fair and a poster session.

For those interested in the basics of wood science, FPS is also offering a one-day Introduction to Wood Science Short Course on Monday, June 11, at the USDA Forest Products Laboratory in Madison. It includes a tour of the lab and transportation to the convention center to hear the keynote speaker.



Activities at the Forest Products Society's 72nd Annual International Convention June 11-14 will include presentations, receptions, a trade fair and a poster session. The event will be held with the 2018 International Conference on Nanotechnology for Renewable Materials.

The Forest Products Society is a not-for-profit technical association founded in 1947 to provide an information network for all segments of the forest products industry. For more information

on the FPS convention, visit the event webpage at ic.forestprod.org. For more information on the renewable materials event, visit conference.tappinano.org



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MOVING UP

Renovated APA Lab Will Accommodate Taller Assemblies

by Sheila Cain

Since it opened in 1969, the APA Tacoma Research Center has been home to a wide range of testing that is used to evaluate the performance of wood structural panels, glulam, I-joists, structural composite lumber, and more recently, cross-laminated timber, in a variety of applications and assemblies.

Aside from a 5,000-sq-ft addition in 2006 to accommodate installation of full-scale house and diaphragm performance test equipment, the physical structure of the laboratory has not changed. Until now.

Last October, the APA Board of Trustees approved a \$4.5 million lab expansion project that will address the demand to evaluate full-scale structural assemblies and testing. Interior renovation work is already underway, with demolition of the existing lab space to begin in April and continue for three months. Construction of the new space is expected to begin in July and finish up by year's end.

“While our lab has been well maintained and updated over the years, we need to make significant structural renovations to address the demand to

evaluate full-scale structural assemblies and testing,” said APA President Ed Elias.

Enhanced Testing Capabilities

The ceiling height of the existing laboratory is insufficient to test single-story tall walls (which are 10 ft in height), or stacked shearwalls (such as two-story assemblies or a single-story assembly over a crawl space). Additionally, the laboratory areas available for lateral load tests are limited to approximately 10 percent of the current laboratory area, making the area size-constrained and, in most cases,

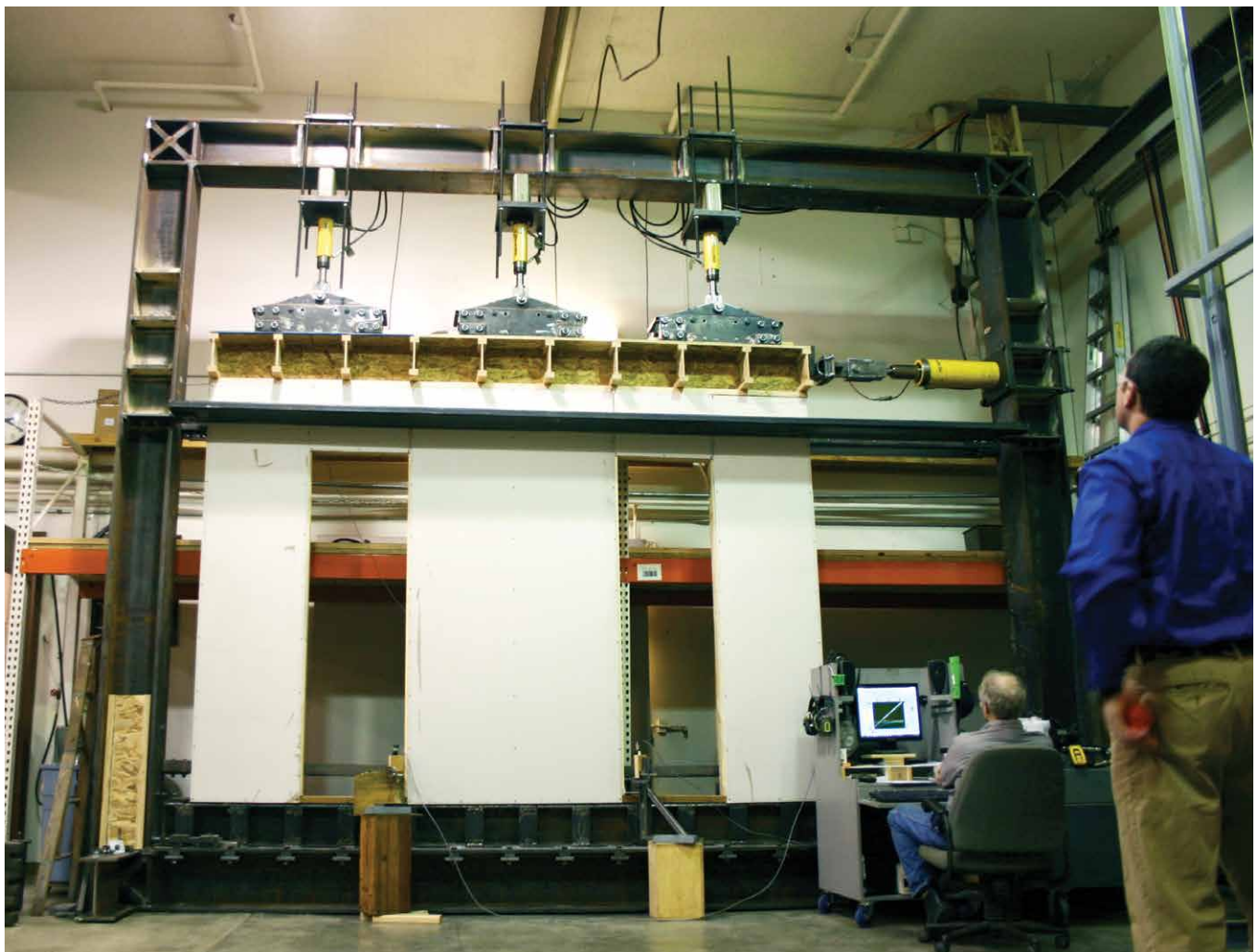


Photo courtesy of APA

The ceiling height in APA's existing laboratory is too low to test specimens taller than 10 ft.

inadequate for imposing the required high loads.

The \$4.5 million estimated project cost includes structural modifications to 25 percent (5,250 sq ft) of the current floor area to create a 70-ft by 75-ft “strong floor.” The roof will be raised as well, raising the building height directly above the expanded floor space to 40 ft. The cost estimate also includes the purchase of new equipment.

New testing capabilities will address tall wall assemblies, dynamic load paths for single-family and multifamily structures, larger gravity loads for buildings of four stories or more, and expanded wood I-joist and engineered wood diaphragm evaluation (see side story, “A Closer Look” for more detailed capabilities of the expanded lab). The strong floor will include a new reinforced concrete slab four feet in thickness with anchors embedded two feet on center to accommodate multiple locations of the new testing apparatus.

The current space available for testing is compartmentalized, says B.J. Yeh, APA’s technical services director, prohibiting testing of most large-scale wall and floor diaphragms. Even conventional 24-ft-by-24-ft diaphragms are too large to test in the existing space, says Yeh, and must be tested in a shed adjacent to the lab. The new, column-free area will allow for larger configurations as well as U- and L-shaped assemblies.

“These are more reflective of what’s being built today,” says Yeh. “Assemblies are not just rectangular shapes anymore.”



Photo courtesy of APA

APA’s renovated lab will feature taller ceilings and a new strong floor – like this one at the Forest Products Lab in Madison, Wis.



Photo courtesy of APA

Lack of space in APA’s existing lab necessitated construction of an addition adjacent to the lab in 2006 to test even conventional 24-ft-by-24-ft diaphragms. The main lab’s new, column-free space will allow for larger configurations as well as U- and L-shaped assemblies.

A Closer Look

APA’s \$4.5 million laboratory renovation project will address marketplace opportunities and research needs by allowing the association to:

- Evaluate shearwall capacities for taller walls (10-12 ft in height) in single-family construction
- Analyze dynamic load paths through multiple stories of both single-family and multifamily buildings
- Evaluate combined lateral shear and wind lift in perforated shearwalls in single- and multifamily construction (current design procedures address only lateral loads)
- Account for larger gravity loads imposed on wood structures four stories or taller
- Research design of interior shearwalls to accommodate cantilevered diaphragms in buildings four stories or taller
- Explore wood I-joist/EWP diaphragm evaluations beyond conventional 24-ft by 24-ft configurations (expanded configurations and aspect ratios are more realistic for design within multifamily housing)
- Test dynamic (two-directional versus one-directional) loading on large-scale wood diaphragms
- Test hybrid construction of portal frames with engineered wood and steel components for multi-story nonresidential buildings
- Develop structural members for use within innovative floor and roof assemblies, including balloon frame construction or high-load shearwall assemblies
- Evaluate shearwall capacities for fundamental design tables applicable to both shearwalls and diaphragms using cross-laminated timber
- Design and test heavy timber cross-braced (glulam and SCL) assemblies to resist lateral loads across large spans in nonresidential construction

Current Constraints

APA researchers have long had to make do with the space they had available, says Yeh. While APA's testing of assemblies and configurations is accurate, the methods are not always ideal. For example, because the height of the lab is limited, shearwalls over 10 ft tall often have to be tested horizontally instead of vertically. Now, the 40-ft-tall space will allow for vertical testing of walls up to 35 ft tall.

Alternatives to conducting tests at APA have included borrowing or leasing space in labs at universities in British Columbia, Wisconsin, Oregon or eastern Washington, or contracting with outside testing labs. APA staff and board members considered this when exploring options, but concluded that using space elsewhere would prove costly and delay testing by months or even years, since availability is scarce. The lab expansion team also explored building or renting a warehouse nearby to fulfill the need for more space, but that didn't pencil out either. Remodeling the existing structure in Tacoma proved to be the most viable option.

Continued page 16



Photo courtesy of APA

Once the renovation to APA's lab is complete, shearwalls taller than 10 ft will be able to be tested at full height, like the specimen in this photo taken at Simpson Strong Tie in Stockton, Calif.

APA Physical Laboratory and Equipment Needs

Physical and Equipment Limitation	Current Facilities	Needed Facilities
Ceiling Height (ft)	24	40
Strong Wall Height (ft)	10	30
Strong Floor Area (sq ft)	30x40	70x75
Tie Down Capacity (lb)	25,000	100,000
Load Actuator (thousand lbs)	55	100
Hydraulic Stroke (in)	±10	±20-25
Pump Capacity (gal/min)	55	120



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MEET YOUR NEW MANAGER

Eric Sporer Heads Up APA Lab

As APA's research lab expands its capabilities with an upcoming \$4.5 million renovation, it will be moving forward under the leadership of a new manager.

Eric Sporer comes to APA from Brooklyn, N.Y. He took over as APA's laboratories manager last April, replacing Ben Herzog, who left APA last year for a career change.

Sporer holds a Master's in mechanical engineering from Columbia University, a Master's in product development from Chalmers University of Technology and a Bachelor of Science in mechanical engineering from Lehigh University. Before coming to APA, he was the associate manager at Carleton Laboratory at Columbia University, a strength-of-materials lab that tested steel, concrete and wood. There, he supported academic strength-of-materials research and provided testing services to support the greater New York City engineering and construction industries.

Sporer is enthused to be working at APA, where so many materials testing methods in use today were developed from research performed at its lab. As the industry has changed and building assemblies have gotten larger, research labs like APA have been faced with the need for more space and more sophisticated equipment to keep up with testing requirements. APA's renovation will offer a larger floor area and taller ceilings, allowing for full-scale testing of wall assemblies. That's something Sporer finds enticing.

"After awhile, you run up against the limit of what your equipment can do," says Sporer. "Having these new capabilities is exciting. It will be interesting to see how (assemblies) behave in full scale and not cut-down specimens."

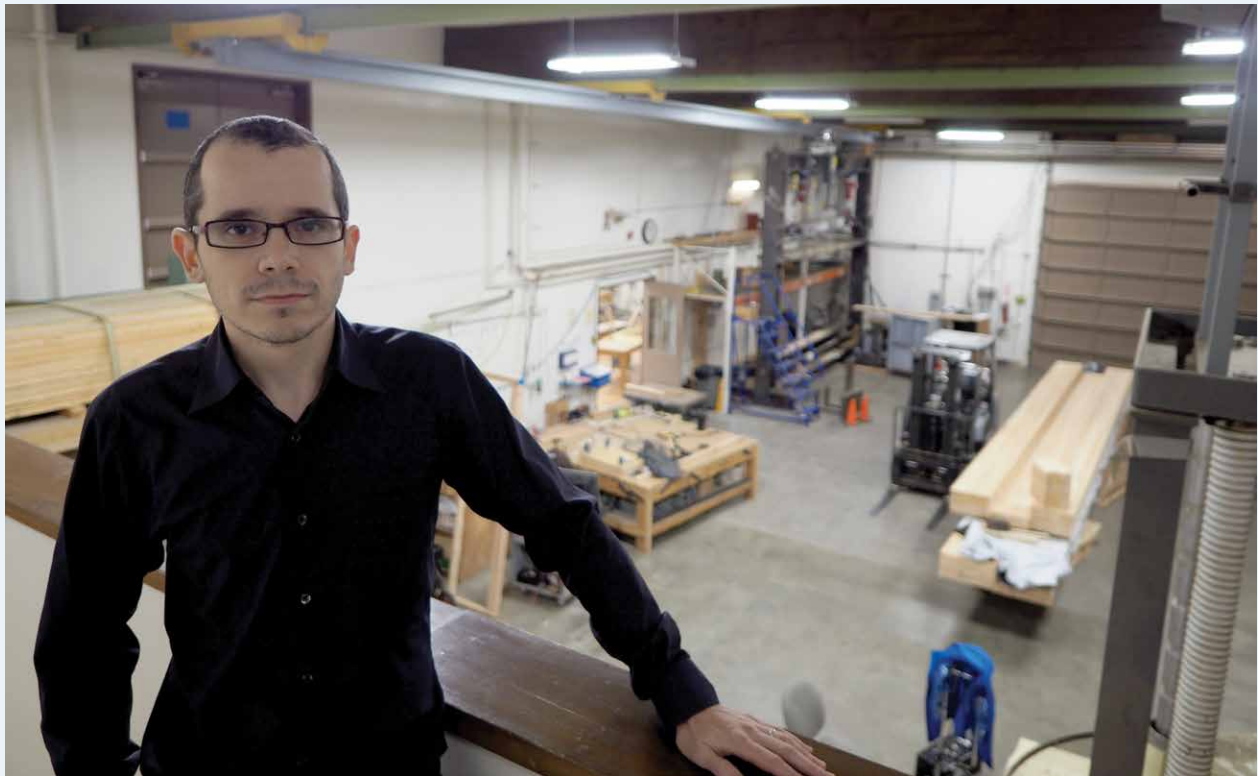


Photo courtesy of EWTA

Continued from page 14

Financing the project will be addressed in three ways: spending down \$2.5 million in APA reserves (within the limits of the association's current policy), securing a \$2 million loan, and assessing

a temporary membership dues payment. The APA finance committee and board of trustees reviewed the financial plan in detail before voting to approve the project last October. 

Sheila Cain (scain@engineeredwood.org) is communications director of the Engineered Wood Technology Association and editor of its Engineered Wood Journal.



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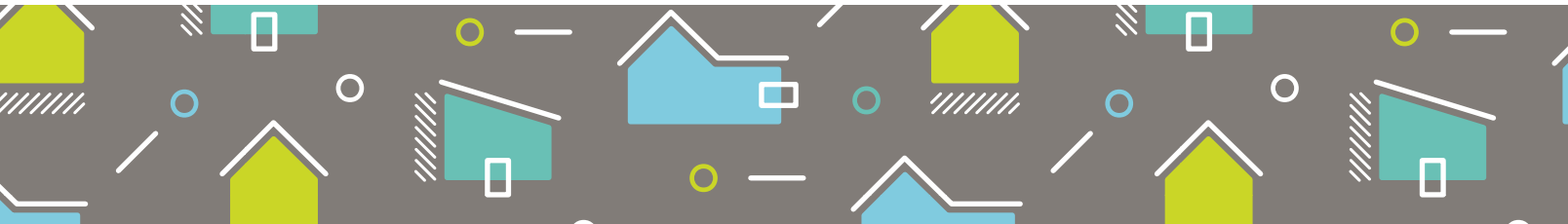
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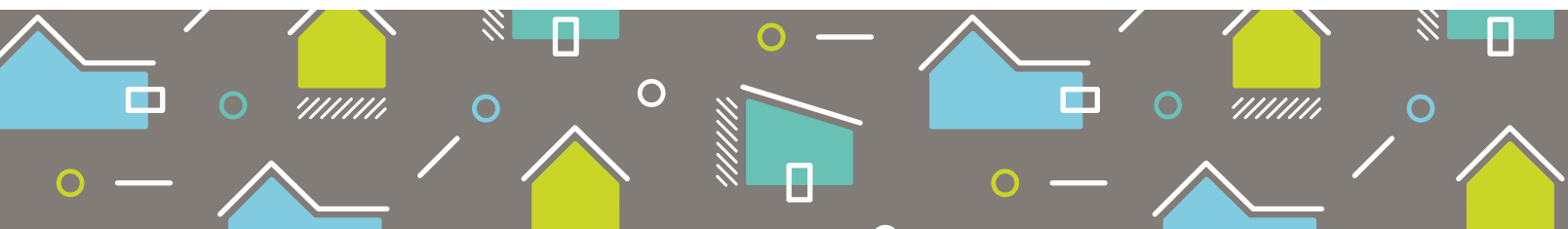
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INDUSTRY OPTIMISM

Annual Survey Shows Members Hopeful for Continued Recovery

by Sheila Cain

Engineered Wood Technology Association members seem to be settling into a groove, as the responses to the association's most recent Business Outlook Survey indicate steadily optimistic business projections.

Responses to the annual member survey revealed very little change in sentiment from those that were received last year at this time, but the shifts that did appear show that members, for the most part, are expecting a relatively comfortable year ahead.

The survey was sent out to members in January 2018 to capture member perceptions of growth, their companies' employment levels and other business related issues.

Responses are reflected in the charts on this and the following pages, which also track survey responses from the past five years. While sentiment isn't nearly as rosy as it was back in 2013 and 2014, it's nowhere near the lows of 2012 and earlier.

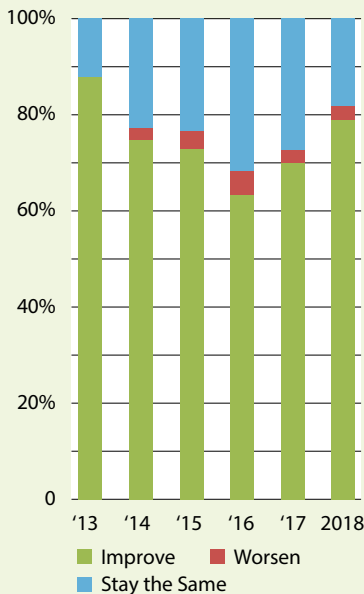
How important are the following for recovery:

	Very Important	Important	Unimportant
State of the U.S. housing market	64%	36%	0%
Government regulation	55%	39%	6%
Government economic policy	35%	65%	0%
Marketplace competition	39%	55%	6%
Raw material prices or supply	37.5%	37.5%	25%
Transportation costs	16%	42%	42%
International exchange rates/trade policies	30%	33%	37%
Labor issues	22%	47%	31%
Economic uncertainty	60%	32%	8%

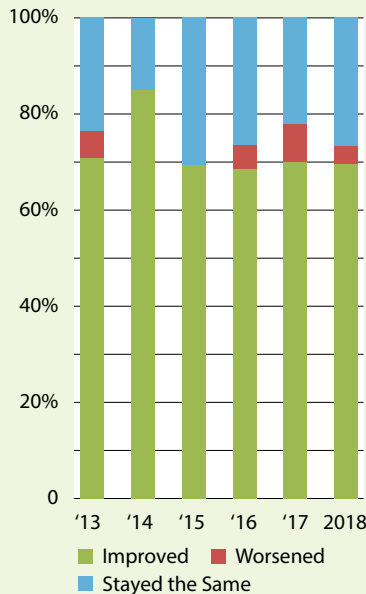
Perhaps the most marked change from the previous year came in the responses to the question, "What is your business projection for the new year?" Seventy-nine percent of respondents felt business would improve, compared to

71 percent the previous year. This was the second year member optimism rose. In 2016, just over 60 percent of members felt their business was improving. Eighteen percent of respondents thought business in 2018 would stay the same as it was last

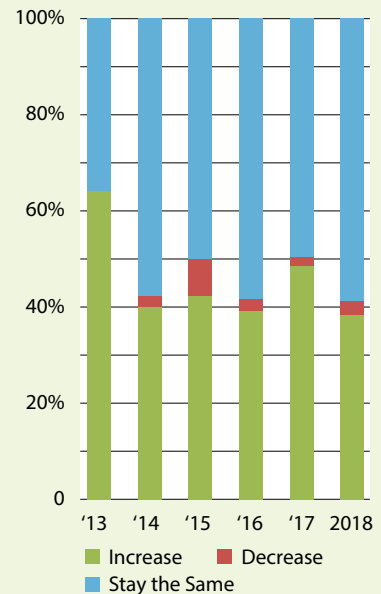
What is your business projection for the new year?



Did business improve, worsen or stay the same this past year?



What is your employment projection for the new year?



year, compared to 27 percent who felt this way last year. Only three percent felt business would worsen this year.

In response to a question that asked members to reflect on the previous year, 70 percent of members felt that their business had improved this year over last, similar to responses from the previous year (71 percent). In answer to the question, “Did business improve, worsen or stay the same this past year?”, 27 percent of respondents felt that business stayed the same in 2017, compared to 22 percent who answered the question the previous year.

When it comes to employment levels, fewer responding members were as optimistic as they were the previous year. In the 2018 survey, 39 percent answering the question, “What is your employment projection for the new year?” thought that employment levels would improve this year, compared to 49 percent in 2017. While more people thought that employment levels would stay the same this year compared to last (58 percent compared to 49 percent), few thought they would decrease (3 percent for 2018; 2 percent for 2017).

Perhaps members are sensing unease due to reports of looming worker shortages in the wood products field. Two reports released in the past few years

(one from The Manufacturing Institute and the other from Deloitte) show that the United States faces a need for more than 3.5 million manufacturing jobs over the next decade, with 2 million of those jobs going unfilled due to the “skills gap” between retiring Baby Boomers and the smaller number of young people who see the manufacturing industry as a career destination.

Overall, members’ optimism for their businesses is high: 70 percent who answered the question, “How optimistic

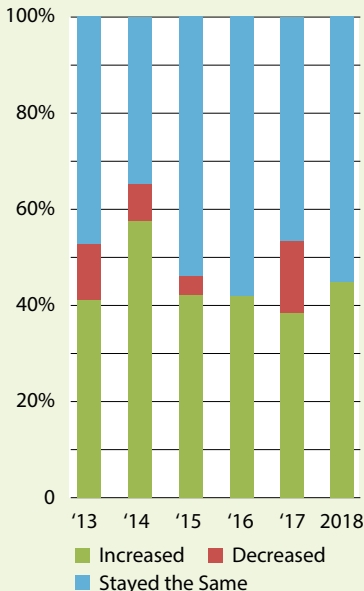
are you about your wood-related business this year versus last year?” said they felt more optimistic about their wood-related business than they did last year. It’s varied little from the previous year (68 percent) but wildly from 2016, when just a little more than 40 percent of responding members felt more optimistic about the year ahead.

Members have stayed nimble in an economy that, while presently relatively stable, could change at any moment. When asked, “What has your company



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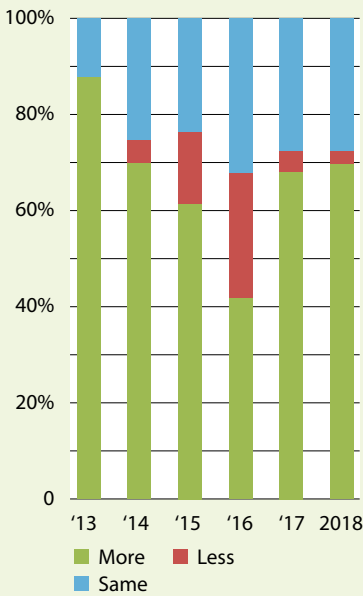
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How optimistic are you about your wood-related business this year versus last year?



done, if anything, to adapt to economic conditions or seize opportunities?” many emphasized the importance of customer service. “(We’re) adding people to better service the industry,” said one member. “We have...tried to increase contact with our customers and potential customers,” said another. One member said their company is investing in more offices: “(We’re) starting to open satellite offices to be closer to our customers. Hopefully this will cut down on their travel costs and our travel expenses.”

Some members saw the value in investing in new equipment. One comment: “We have aggressively reinvested in plant and equipment and will be testing the viability of newly sourced equipment which will allow for expansion of volumes and the top line (and bottom line) numbers.” And another: “(We’re) working with industry producers to develop new automated equipment, or update antiquated equipment/processes.”^{EWJ}

Sheila Cain (scain@engineeredwood.org) is communications director of the Engineered Wood Technology Association and editor of its Engineered Wood Journal.







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OSU DOUBLES DOWN

College of Forestry Offering Pair of New Programs, New Buildings

by Iain MacDonald and Eric Hansen



Image courtesy of OSU College of Forestry

College of Forestry instructor Ruth Fore and undergraduate student Savannah Stanton discuss CNC machining.

By the time classes start this fall, Oregon State University College of Forestry students will have two new programs to consider. The college will offer the opportunity to major in Renewable Materials with an option in Advanced Wood Manufacturing. In addition, the college's TallWood Design Institute will be offering a certificate program in mass timber manufacturing and construction, targeting manufacturers and building contractors. By mid-2019, both programs will benefit from the opening of a new advanced wood products laboratory and education center.

The offerings follow several years of change at the university's College of Forestry. In 2010, The Department of Wood Science and Engineering conducted a major overhaul of its undergraduate program, including rebranding as Renewable Materials. At its heart, its degree program is focused on the study of wood products and creating employees for the forest products industry. However, the school has recently diversified by creating a degree option in Art & Design. This option produces a graduate that will likely be more suitable for value-added industries as well as the design side of the industry.

These new programs come at a time when interest in traditional wood-

product programs is waning, and colleges are looking for ways to create programs that better-address the high-tech nature of today's industry. OSU's new offerings reflect two trends: the ever-growing importance of digital technologies in the manufacturing sector, as well as the tremendous interest in mass timber construction throughout the U.S. The latter has resulted in innovative new wood buildings appearing in several cities, including the T3 office building in Minneapolis, Minn. and the eight-story Carbon 12 building in Portland, Ore. Oregon has become the de facto hub for mass timber construction in the U.S., and researchers from OSU have played a central role in

the development of the state's two mass timber manufacturers, DR Johnson and Freres Lumber Company.

Students are required to obtain six months of real-world experience during their college career. Based on the skills they develop at OSU as well as internship experience, demand is very high for OSU's graduates. To meet this demand, the school is in an active growth mode with a goal of doubling undergraduate enrollment in the next four years. Graduates typically have multiple job offers and obtain starting salaries in the \$50,000-per-year range.

Advanced Wood Manufacturing

Most recently, the college has added a new option in Advanced Wood Manufacturing and graduates from this option will be an especially good fit for APA members. Students pursuing this option

will have course work from industrial engineering to compliment multiple digital manufacturing (3D computer-aided-design (CAD), computer aided manufacturing (CAM) and computer numerical control (CNC) classes now offered within Wood Science and Engineering. Funds were recently invested in a digital fabrication lab that includes CNC machining, 3D printing, and laser cutting/engraving to support these courses. During the next year, the program plans to hire a new faculty member in Advanced Manufacturing that can expose students to the role of big data, the internet of things, systems simulation, and robotics in the forest industry. The new Emmerson Advanced Wood Processing Laboratory will be a critical teaching space for this new faculty member and will add a new dimension of skills to graduates from the program.

Partnering with Industry

To meet the college's goal of doubling enrollment, leaders are actively partnering with forest industry companies through a program called "Friends of Renewable Materials." These "friends" partners are increasing their presence on campus, thus getting to know and supporting students throughout their college career. They are helping program leaders recruit by getting the word out in their local communities. And, they are making significant investments in scholarships. These scholarships target top students and, for freshmen, are "guaranteed" for four years, as long as the student maintains a certain GPA. The guaranteed nature of the scholarships make them a key recruiting tool, along with the program's connection to industry, stellar record of job placement, and high starting salaries.



Former Masters of Science student Kyle Sullivan discusses his cross-laminated timber research.

Image courtesy of OSU College of Forestry



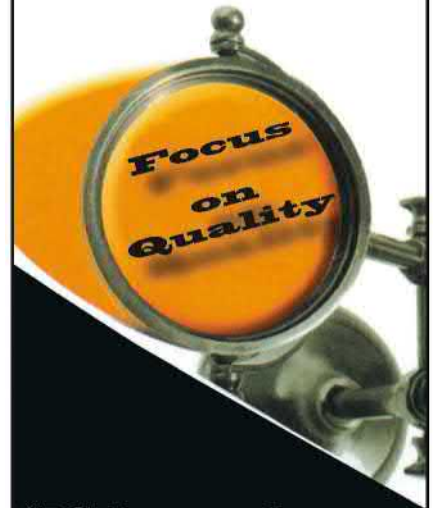
Image courtesy of OSU College of Forestry

Contractors building the new 80,000-sq-ft George W. Peavy Forest Science Center set a DR Johnson CLT panel at a splice connection. This particular type of connection was tested at OSU and funded in part by the TallWood Design Institute.

The TallWood Design Institute

The TallWood Design Institute (TDI) is a relatively new partnership between Oregon State University's Colleges of Forestry and Engineering and the University of Oregon's College of Design. Created in 2015 but adopting its formal name just last year, TDI's mandate is to grow the manufacturing base for mass timber products – engineered products such as cross-laminated timber, nail laminated timber and others – while also eliminating barriers to greater use of structural wood products in multifamily housing and nonresidential buildings. To do that, the institute carries out industry-focused applied research, offers various training and education programs, and works with industry to provide testing and product development services. Wherever possible, researchers and educators from the wood science, engineering and architecture fields work together on these initiatives in a holistic, interdisciplinary manner.

One of the first training initiatives that TDI has taken on is a new certificate program in mass timber manufacturing. The program will teach skills that might be missing in wood products manufacturing firms that have traditionally focused on volume-based commodity products. When serving mass timber markets, a high proportion of products supplied – as high as 90 percent in Europe – are custom-fabricated to the specifications of a particular building project. This means that workers will require skills such as advanced 3D CAD, CAM, and CNC manufacturing. The program will teach these skills, as well as quality control and mass timber construction, in a flexible way that will maximize access to the training for workplace learners who cannot be away from their production facilities for extended lengths of time. Some elements of the program will be taught by e-learning, while others will be offered at regional community colleges so that learners don't need to travel too



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far to attend. The culmination of the program will be an intensive design-fabricate-build course which, as the name suggests, will take learners through the process of designing a mass timber structure in a CAD environment, bringing the design information digitally into the CAM environment, then using a large-format CNC machine to cut all of the elements required for the structure. The group will then erect the structure. This kind of simulation of a real-life project has been shown to provide very valuable lessons in troubleshooting and project management, and will allow learners to employ all of the skills they have learned throughout earlier parts of the certificate program.

Campus Construction

Participants in the design-build program will travel to the Oregon State University campus for this final course, and will use the advanced equipment that will be housed in TDI's new A.A. "Red" Emmerson Advanced Wood Products Laboratory. The 15,000-sq-ft lab – which will be located in the \$79.5 million Oregon Forest Science Complex currently under construction – will include office and meeting space, a manufacturing bay and a structural testing area. The manufacturing bay will house a CLT press, a large CNC, an industrial robotic cell and various supporting equipment. The structural testing area will be cen-

tered around a 100-ft-long reaction wall and strong floor which will triple TDI's capacity to conduct structural testing on advanced wood products. In addition to conducting research, the manufacturing bay of the lab will be a venue for training, technology demonstration events and practical workshops.

Also under the Oregon Forest Science Complex roof will be the new 80,000-sq-ft George W. Peavy Forest Science Center, home to the College of Forestry and its programs.

Throughout these facilities, visitors will notice innovative uses of advanced wood products as the facility highlights cross-laminated timber made in Oregon.

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Rendering courtesy of Michael Green Architecture

The TallWood Design Institute's new 15,000-sq-ft A.A. "Red" Emmerson Advanced Wood Products Laboratory will be housed with the George W. Peavy Forest Science Center in the \$79.5 million Oregon Forest Science Complex currently under construction. The complex is expected to be open in the spring of 2019.

The look and atmosphere of the complex will reinforce Oregon State's international status as a premier forestry, natural resources and wood science institution devoted to improving our forest landscapes and ecosystems.


Construction of the complex is scheduled for completion by Spring of 2019. 

Iain MacDonald is the associate director of the TallWood Design Institute, a partnership between Oregon State University's Colleges of Forestry and Engineering and the University of Oregon's College of Design. He can be reached at iain.macdonald@oregonstate.edu. Eric Hansen is the department head of Oregon State University College of Forestry's Department of Wood Science and Engineering. He can be reached at eric.hansen@oregonstate.edu



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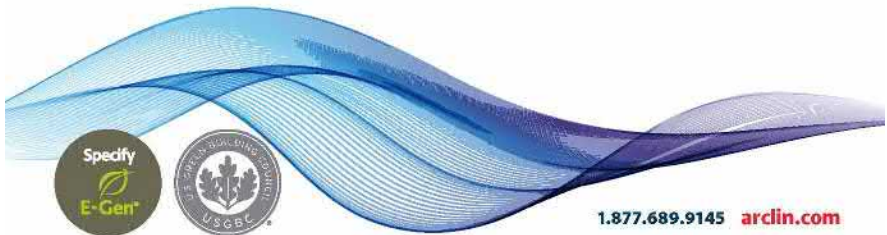



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This membership directory, updated for 2018, includes company descriptions and contact information for all EWTA members. It's just one of many tools designed to help members connect with each other and the industry.

Membership Benefits

The benefits of EWTA membership are many. Among them:

- Direct business-to-business links with your customers in the engineered wood products industry through such vehicles and events as Info Fair, an annual supplier show held in conjunction with the APA annual meeting; industry forums and seminars; APA annual meeting events; company news and advertising in the *Engineered Wood Journal*; and dissemination of your company news and technology innovations via the EWTA website and *Connections* e-newsletter.
- Free access to the APA monthly housing starts and quarterly production reports, and discounts on other APA publications and reports.
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BASF - We create chemistry – Global supplier of MDI to the wood industry with extensive experience in MDI conversions.

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Baumer Inspection GmbH

Baumer Inspection GmbH specializes in optical surface inspection systems. In over 35 years of quality service, we have installed more than 500 systems world-wide and are a leader in scanners for fully automatic inspection and process control. Baumer Inspection offers inspection systems for plywood, MDF, MDP, paper, film and foils, flooring and surfaces of furniture panels. Our highly skilled and motivated team always pushes the limit of what is possible to bring you the newest innovation in vision technology.

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BRUKS Rockwood

Bruks is a specialty Materials Handling company with a 120-year history in engineering and manufacturing innovative equipment for Wood Chipping and Hogging, receipt at the Mill through Truck Dumps and Pits, Storage & Recovery, Material Drying, Log Handling, Butt Flare Reducing, Conveyor systems, Screening Hogs and Hammermills. Bruks Drum Chippers, especially, have been marketed and installed in North America since the 1970's with over 10,000 units operating worldwide.

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Brunette Machinery Company Inc.

Specializing in wood processing machinery and material handling systems for the Forestry and Biomass industries: CBI Grizzly Mill, BioSizer®, Chippers for Pulp-chips or Micro-Chips, Electric Log Sweeps, Log Decks, Log Singulators, Rotary Debarkers, Vibrating Conveyors. Custom engineered solutions to take control of your fiber supply and get more from your mill.

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Casey Industrial, Inc.

Casey Industrial has provided process installation services for over 60 years to the Forest Products sector. We self-perform all major trades, work nationwide and have experience with all major technology providers supporting APA members.

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Release Innovation™

Chem-Trend LP

Chem-Trend has long been known as a global leader in the development of release agent technology to the world's industries. Our sealers, release agents and lubricants are rapidly gaining acceptance in the wood composites industry, offering significant productivity improvements including increased through-put, improved output quality and definition, cleaner conditions/environment, greater productivity, less downtime and increased costs savings.

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Clarke Veneers and Plywood

Clarke Veneers and Plywood is an international trading company of wood products, specializing in imports, exports and domestically traded veneers - including hardwood and softwood species for structural panels, in MDO, HDO and other applications requiring clear, sound faces.

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Clarke's Industries, Inc.

Clarke's provides a broad range of products for the Panel Board Industry. The products include Material Storage and Metering Bins, PyroGuard Spark Detection and Extinguishment System, Hi Speed Abort Gates, Back draft Dampers and Explosion Venting, Waste Wood Processors, Rotary Screens and Classifiers, Rotary Airlocks/Feeders, Fans, Dust Collection and Pneumatic Conveying Systems.

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CMA engineering Inc.

Since 1986, CMA engineering Inc. has accomplished a number of projects in the manufacturing end of the forest products industry, including the conceptual design, budget preparation, process engineering, detail engineering (mechanical, electrical, civil and structural), equipment procurement, project management, construction management, PLC/HMI programming and start-up of board plants (OSB, Particleboard and MDF), plywood and veneer mills, bioenergy plants, engineered wood product plants and sawmills.

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Coastland Wood Industries Ltd.

Coil Manufacturing is the leading manufacturer of rotary drum blenders and spinning disc atomizers for resin application in the engineered wood industry.

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Cogent Industrial Technologies

Cogent Industrial Technologies provides expertise in the design and integration of Electrical, Control and IT systems to the engineered wood industry. Cogent offers a proven track record of delivering successful greenfield and modernization projects to major engineered wood clients across Canada and the US. Cogent's services and solutions deliver a safe, reliable and efficient operation and empower personnel to manage and improve operational performance. Our performance initiatives are aimed at increasing process safety, improving operator effectiveness and maximizing equipment availability.

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Coil Manufacturing, Ltd.

Coil Manufacturing is the leading manufacturer of rotary drum blenders and spinning disc atomizers for resin application in the engineered wood industry.

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Combilift USA

Combilift is a specialist forklift & straddle carrier manufacturer producing a wide range of customized handling solutions, all of which are designed for the safe, space saving and very productive handling of the long and bulky loads. 4-way Combilifts work as counterbalance, sideloader, and narrow-aisle forklifts. The Combi-SC (Straddle Carrier) is the cost effective solution for the handling of containers and oversized loads.

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Connexus Industries Inc.

Connexus Industries Inc. manufactures and distributes specialized chain, attachments and sprockets for OSB manufacturing plants. We also are manufacturers of Laharco Laser Diodes and RENS-Metal, Shark Metal Detectors. Locations in Atlanta, Quebec, Portland & Vancouver. Formerly Viking Chains, I'Anco Products and Lacey Harmer Inc.

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Con-Vey Keystone, Inc.

Con-Vey has over 70 years experience in custom material handling solutions. We engineer and manufacture equipment for Plywood, OSB, PB, MDF, LVL, I-Joists and Specialty Panels. Con-Vey supplies world class saw lines, finishing lines, sanding lines, feeders, stackers, conveyors, specialty automated equipment and robotic solutions. Con-Vey means Quality and Value you can count on.

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www.con-vey.com



COSTA Sanders LLC

Building on 60+ years of experience manufacturing industrial calibrating, sanding and polishing equipment, Costa's large panel series machines continue a tradition of rugged world class machinery that made Costa an industry leader in the field of industrial sanding-calibrating equipment. These "super duty" solutions are engineered and manufactured to the highest quality standards, in modular frames, with the right combination of working units, motors, and feed speeds that best fits the industrial process of today and tomorrow. Costa Sanders offers machine solutions engineered expressly to fit each client's own manufacturing environment and production needs - whether Particle Board, Fiberboard, Plywood, OSB, or CLT. Our sanding systems are capable of processing up to 145" wide panels with thicknesses up to 13" at the required industry production speeds

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Cross Wrap Ltd.

CW BOARD PACKAGING LINE - WEATHERPROOF, WORRY-PROOF. CW board packaging lines automatically wrap boards without straps, saving cost and trouble of a strapping unit. The unique advantage is CW packaging lines automatically wrap different sized packages on the same line. Suitable for all materials; plywood, veneers, MDF, OSB and any wood-based boards. All-weather and moisture protection for contents and label. High quality packaging - durable in handling, storage and transportation. Save packaging material cost - no need for straps, side or corner covers or bottom pallets. Recyclable packing material. Fully automatic machine saves labor costs. Optional automatic bottom skid feeder. Optional package labelling.

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DIEFFENBACHER

Dieffenbacher Customer Support, LLC

Dieffenbacher is an international group of companies specializing in the manufacturer of press systems and complete production systems for the wood, automobile and supplier industries. As an independent fifth generation family company, we have stood for continuity, tradition and reliability for over 140 years. Our Wood business unit plans and implements complete solutions for the manufacture of wood-based panels, such as particleboard, MDF, OSB and LVL plants.

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DO2 Industriel

The DO2 Rapid Wrapper Automatic Panel packaging system offers outstanding performance. The wrapping machine's electrical, mechanical and pneumatic components, its design, the programming structure and tactile interface have all been designed for easy use and no-hassle operations. All of the wrapper's components are robust and maintenance-free. Built with durability and efficiency in mind, the wrapper will optimize your plant's production on a daily basis.

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Dominion Chemical Company, Inc.

Wax nuances are our expertise. With over 60 years of experience in the wax business, Dominion Chemical offers rare and valuable working knowledge as well as trust and proven abilities to bring solutions, support and alternatives to provide the exact product you want. With locations in Virginia and Georgia, Dominion Chemical's capacity to blend, package and create specialty wax formulations will meet your unique needs. We offer an exceptional emulsification process, state of the art blending, compounding, packaging and experienced personnel as well as a full service wax lab dedicated to your needs for R&D, QC, and general product evaluation.

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Dürr Systems, Inc.

Dürr Systems, Inc. has been the industry leader in supplying air pollution abatement equipment for over 45 years. OEM technologies include regenerative, direct fired and catalytic oxidizers, absorption concentrators, and catalytic filtration. This wide variety of technologies guarantees Dürr has the air pollution control solution to meet your needs. Our Aftermarket services include retrofits, rebuilds, spare parts and inspections, ensuring that your system is operating at its maximum efficiency for years to come. With over 4,000 installations worldwide, Dürr has the most effective system for your air pollution control needs.

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DUSTEX | LUNDBERG

Lundberg is a global supplier of air pollution control systems to process industries including the engineered wood products industry. State-of-the-art systems that include the Geoenergy E-Tube Wet ESP, GeoTherm and GeoCat Oxidizers and GeoWet Scrubbers. Geoenergy systems have provided environmental compliance to the engineered wood products industry on wood dryers, press vents and boilers since 1984.

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EcoSynthetix

EcoSynthetix is a renewable chemicals company specializing in bio-based materials that are used as inputs in a wide range of end products. Our commercial products are cost-competitive and exhibit similar performance characteristics compared to the non-renewable products they replace. Our sustainable products allow customers to reduce their use of harmful materials, such as formaldehyde and styrene-based chemicals. Our two flagship products are EcoSphere® biolatex® and DuraBind™ biopolymers. EcoSphere is in commercial use around the world in the paper and paperboard packaging industries. DuraBind™ biopolymers are a no added formaldehyde binder system used in the production of wood composite panels.

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Electronic Wood Systems, N.A.

EWS North America was founded in 1993. We are a leading supplier of quality control measuring systems for the wood composite panel board industry, including: Thickness Gauges, Blow Detection, Press Protection Devices, Spark Detection & Extinguishing Systems, Mass (WPUA) Measuring, non-contact Weigh Scales and Density Profile Measuring Systems.

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ESOT

ESOT began operation in 2005 in the Central Texas area. As a result of customer referrals we are now bringing LED retrofits, new installation lighting and hazardous lighting solutions to commercial, retail, institutional and industrial facilities around the country. ESOT is the South Central U.S. distributor for SonicAire fans (www.iesclean.com) that provide continual and safety compliant cleaning of fugitive combustible dust and lint. ESOT offers facility audits and turn-key installation services for all projects and is a member of ISNet and VPPPA. Let ESOT design the right engineered solution for your next project.

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Evergreen Engineering, Inc.

Evergreen is a multi-discipline (mechanical, electrical, civil/structural and environmental) engineering firm. From project planning and feasibility studies through detailed engineering, construction management, maintenance and process consulting, to start-up and commissioning support, Evergreen can handle any project in your mill. Our wood products experience includes OSB, LVL, I-Joist, Particleboard, MDF, Hardboard, WPC, Pulp & Paper, Lumber, Plywood, Chemical and Resin plants. "Our mission is to provide customized support to move our clients' vision to reality by delivering practical engineering solutions, displaying project leadership and contributing technical expertise."

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Evertree

Plant Based Chemical Solutions offering a revolution in industrial solutions and materials with cost competitive, plant-based chemicals that offer the same or better performance than petroleum-based chemicals. Our first product family SynerxiD™ offers a 20 to 40% reduction of formaldehyde and petroleum based resins used in wood based panels with a significant raw material cost reduction while achieving the same panel properties.

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Fagus GreCon

GreCon – Since 1911, Innovation is Our Tradition. MEASURING SYSTEMS: Improves your bottom line. Check out the full range of in-line measuring systems: thickness gauges, blow & delamination detector, moisture meters, raw density profile. Weight per unit area across the whole production width at the mat former and after the press. Detect surface defects on décor panels and flooring. SPARK DETECTION & EXTINGUISHING SYSTEMS: Provides safety for your production. Detect sparks and extinguish them before the filter. Detect heat buildup in silos, bag houses and storage bins. Outlined in NFPA 69, 654 and 664 standards. Factory Mutual Approved.

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Charlotte, NC 28217
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www.grecon.us



Flamex, Inc.

Flamex Inc. is a leading supplier of customized industrial process fire prevention and protection equipment. We specialize in the protection of facilities that handle combustible dusts that utilize pneumatic dust collection and air filtration systems. To address the process fire hazard inherent in various industrial applications, our company pioneered the utilization of a new technology in North America by introducing the FLAMEX Spark Detection and Extinguishing System in 1977 and the MINIFOG PressProtect System in 1997 for the protection of Industrial Presses. The flexibility of these systems allows their use in other hazardous areas such as Thermal and Hydraulic oil rooms where AFFF Foam Fire Fighting systems can be utilized for further protection.

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epridgen@sparkdetection.com
www.sparkdetection.com



Franklin Adhesives & Polymers

Franklin Adhesives & Polymers, a division of Franklin International, manufactures adhesives for the domestic and global wood furniture, millwork and engineered-lamination markets. We have led the way in the innovation of wood adhesives and various types of wood bonds and have developed adhesive solutions for many applications in the wood product manufacturing plant. Under the trusted brand names Titebond, Multibond, ReacTITE and Advantage, our products provide superior performance in wood assembly, solid edge and face gluing, engineered product lamination and finger jointing.

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Fusoni U.S.

Fusoni develops and manufactures release agents and additives for panel board manufacturing, and also for paper impregnation processes. For more than 30 years we have been serving clients in Europe, Asia and the Americas. Our chemicals expertise extends to other industries, such as release applications in bakery and polyurethane systems. We add value through chemistry, and work closely with our customers, helping them improve the properties of their products and reducing production cost through excellent release and additive performance. We look forward to working with you to make your products better and your business more profitable.

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Georgia-Pacific Wood Adhesives

bonds that last. advancements that work.™

Georgia-Pacific Chemicals, LLC

Georgia-Pacific Chemicals offers a portfolio of thermosetting resins for plywood, oriented strand board and laminated veneer lumber applications as well as custom-formulated solutions to meet our customer's specific needs. Our innovative RESI-BOOST® adhesive technology, when used in combination with RESI-BOND® and RESI-MIX® adhesives, has demonstrated decreased press times as much as 10-20% without sacrificing bond quality nor increasing temperatures. It can lower glue usage as much as 3-10%. RESI-BOOST adhesive technology joins our other quality products - WOODWELD® spray dried powders; RESI-STRAN® and RESI-BOND liquid adhesives; and RESI-MIX® and RESI-MIX® Ultra ready-to-use mixed adhesives.

Contact: Georgia-Pacific Wood Adhesives
Phone: 866-4GP-CHEM/866-447-2436
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Atlanta, GA 30303
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Engineered Solutions - Project Management - Complete Systems - Service and Support

Globe Machine Manufacturing Company

Globe Machine offers single machine centers along with complete systems to the following industries: OSB, MDF, particleboard, plywood, strawboard, moulded door skins, membrane presses, siding, LVL, laminate flooring and sheet plastics. Globe Machine is the leader in the supply of automated I-joist assembly systems and has achieved a leadership role in the cement fiberboard industry and moulded door skin lines. For 100 years Globe Machine has served the forest products industry.

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Grenzbach Corporation

We are a leading global manufacturer and supplier of drying systems to the veneer and building materials industries with over 400 dryer installations worldwide. Grenzbach's new Wood Fiber Insulation Board line produces materials in densities of 3 to 10 lbs. per cubic foot. Our veneer product line includes dryer infeed and outfeed systems, jet and longitudinal dryers, and color veneer grading and stacking systems. Grenzbach has completed extensive rebuilds on all makes and models of veneer and gypsum dryers. Complete parts and service support is also available.

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Guardian Chemicals Inc.

Providing solutions, results and meaningful service has earned Guardian Chemicals Inc. the enviable industry reputation as the "go to" people for chemical technology and services. Our extensive research and development group, in house ISO 14001 certified manufacturing and products like our revolutionary patented PRESSGUARD series release agent technology for MDI resins in continuous and multi-opening presses, keep us at the forefront of the engineered wood industry. From W.E.S.P. and Scrubber treatment technology, process chemicals and defoamers to maintenance chemicals, odor control and corrosion prevention, Guardian's wood group provides our partner clients with a complete package along with the flexibility to adapt products to the specific needs of each individual application and customer.

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H.B. Fuller

H.B. Fuller Plywood Adhesive Coated Solutions has specialists for all your composing needs. Gain improved wood recovery and reduced unit costs at the composer through a package of specialized tapes and strings, patented adhesive application equipment, process improvement tools and expert service for both green and dry veneer process.

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Hansen-Rice, Inc.

Solutions driven organization providing value to construction projects through Pre-Construction, In-House 3D Design, General Contracting and Self Perform Steel & Thermal.

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Henkel

Henkel is the world's largest Adhesive company, and LOC-TITE PURBOND offers advanced chemistry, ecologically compliant 1 and 2 component structural wood adhesives. LOC-TITE PURBOND is a world leader in Polyurethane and Polyurethane Hybrid adhesives, offering ductile bond lines, zero Formaldehyde, zero solvents with a wide range of open and set times for Glulam, CLT, Finger jointing, and innovative applications, both cold setting and RF/hot press. With a strong North American sales and technical team and a fully equipped wood lab, we can provide the solutions, support and technology to meet the demanding requirements of traditional wood bonding and innovations of the future.

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HexArmor

HexArmor is a global PPE (personal protective equipment) manufacturer that uses innovative technologies to build high performing hand protection, arm/body protection, and eyewear. At HexArmor, we understand the daily challenges faced by safety teams in the wood products industry – working to meet growth and operational expectations while keeping employees safe on the job can be a tough balancing act. Injuries are costly. Down time and lost productivity damage company reputations and slow growth. Let HexArmor help you build a PPE program that keeps you operationally efficient while giving your employees the best opportunity to go home safely to their families.

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Hexion Inc.

Hexion Inc. is a leading global source for adhesives, resins, formaldehyde, melamine and derivatives serving a broad range of markets including the forest products, foundry, automotive, construction, composites, electronics and oilfield industries, operating more than 50 manufacturing plants in North America, Latin America, Europe and Asia/Pacific. The Forest Products division of Hexion Inc. is the global leader in supplying resins, adhesives, wax emulsions and ancillary products to the forest products industry. Customers use our materials to manufacture a wide range of composite and engineered wood products including plywood, particleboard, oriented strandboard, medium density fiberboard, structural beams, furniture, mouldings and millwork.

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The HT Group

The HT Group provides nationwide recruiting and staffing services providing access to the nation's premier technical, professional, management, and executive talent. We work extensively in building products, forest products, and consumer goods.

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Hunt Guillot & Associates LLC

Hunt, Guillot & Associates, LLC (HGA) is a multi-disciplined project management and engineering design firm. HGA has been serving the forest products industry since the firm's founding in 1997. HGA continues to provide expertise to the Engineered Wood Products, LVL, I-Joist, OSB, Plywood, Particleboard, Glue Lam and Lumber industries. Services provided include project management, feasibility studies, preliminary engineering, detailed design engineering and on-site technical support services.

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Enriching lives through innovation

Huntsman Polyurethanes

For approximately 30 years, Huntsman has been a global leader in the production of the MDI-based resin binders for particleboard, medium-density fiberboard and oriented strand board. Our dedicated Composite Wood Products teams are committed to helping our customers reach their goals in all market conditions. There is no added formaldehyde (NAF) with Huntsman's RUBINATE® resins, and they are considered "exempt" under requirements of the California Air Resources Board (CARB) standards.

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IBC, International Bar Coding Systems & Consulting Inc.

IBC, International Bar Coding Systems & Consulting Inc. - An integrated manufacturer of individual piece wood product specific printer applicators. Complete solutions for finished or in process packs we offer Automated Package labelers (AutoLabeler) for Veneer, OSB, MDF, Plywood, Lumber and EWP. We manufacture tags and labels for any labeling system and are a single source provider for turnkey systems. We offer Vendor Managed Inventory of consumables and integrated data collection systems across North America. We provide full design, build, onsite service, preventative maintenance, training and consulting on a system wide or mill by mill basis.

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Idemitsu Lubricants America Corporation

IDEMITSU/Idemitsu Lubricants America Corporation offers wood industry members a full line of lubricants including synthetic high-temperature chain oils, environmentally friendly gear and hydraulic oils as well as compressor lubricants. By using highly refined, hydro-cracked base oils Idemitsu Lubricants America Corporation can provide high quality blended lubricant products to meet your critical requirements. The customer-oriented philosophy of IDEMITSU is to develop products based on the customer's requirements. Professional Lubrication Engineers can assist in all facets of your lubrication project from problem analysis to product selection and from lubrication maintenance to development of customized lubricant-check systems.

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IMAL - PAL GROUP

Established in the 1970's, the Group is a world leader in the manufacture and supply of equipment and systems. It's extensive production program is able to supply complete turnkey plants for the treatment and processing of fresh and recycled wood, in both the wet and dry areas, for production and processing of particleboard, MDF, OSB, Plywood, Pellets, Pallet Blocks and pressed wood-based products in general. IMAL is a leading manufacturer of glue dosing and blending systems and supplies the most innovative on-line and laboratory quality control devices that are found in virtually all the production plants around the world.

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www.imalpal.com



IMEAS Inc.

IMEAS is a world leader in surface finishing solutions, with over 3,000 machines operating worldwide. 2016 marked IMEAS's 50th Anniversary of Innovation and Service to the Wood Products Industry. IMEAS sanding and grinding machines are used to achieve precise surface finish and thickness on a wide variety of products such as plywood, LVL, CLT, composite wood panels, decorative laminates, flooring and solid surface products, etc. IMEAS specializes in extra wide machines - 12' (3.6 meters) and cross-belt sanding for wood products.

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imeas@imeas.net
www.imeasinc.com

Intertape Polymer Group

Intertape Polymer Group® (IPG®) is the market leader in protective fabrics with over 25 years of experience in the wood industry. IPG is an integrated supplier and manufacturer of woven coated lumber wrap. IPG's wrap offers the ability to advertise your corporate logo in up to four colors and increase brand awareness throughout the transportation process. Available in various weave strengths and colors to fit your needs.

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InterWrap/Owens Corning

InterWrap® is the largest supplier of coated woven wrap to the Engineered Wood Industry. Its custom-printed WeatherPro™ packaging products are designed to maintain product integrity throughout transportation, inspection and storage of sawn lumber, plywood, OSB, all types of beams, I-Joists and composite wood products. InterWrap is a vertically integrated, global manufacturer of innovative coated woven products serving a wide variety of markets. Consistent product quality is achieved by using state-of-the-art equipment along with a strong commitment to partnership with our customers, employees, and suppliers. InterWrap's global supply chain efficiency is achieved by our strategic manufacturing and distribution centers located throughout North America, Asia & Europe.

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www.interwrap.com



Itipack Systems

Itipack Systems has been in business since 1970. We are a manufacturer of automated strapping systems.

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JAX, Inc.

JAX is a full-line lubricant manufacturer with expertise in compounding high-end synthetic and petroleum lubricants. With over 60 years of industry experience, JAX has earned its reputation as a leader in lubricant technology. JAX lubricants are compounded with the finest raw materials and additive chemistry in the industry. Formulation decisions are based upon performance and quality which ultimately lead to substantial, verifiable cost savings in terms of extended machine life, reduced downtime and increased production. Lubrication technology is a continually evolving science. Products that have worked in the past may not be sufficient to provide adequate lubrication in the future. In order to meet the evolving needs of our customers we are constantly analyzing the JAX product line for opportunities to improve value. JAX is a Manufacturer and Global supplier of the highest quality LUBRICANTS for machinery and process.

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KADANT

KADANT Carmanah Design

KADANT Carmanah provides leading edge technology and equipment to optimize fibre utilization for the production of wood-based panels. KADANT Carmanah's products include SmartDISC Strand-ers, SmartRING Strand-ers, Rotary Debarkers and Conveying/Feeding equipment for the oriented strand board market. As a global leader in stranding technology, KADANT Carmanah holds an impressive 80% of this market share.

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www.kadantcarmanah.com



Kimwood Corporation

World's leading producer of new equipment and OEM parts for Kimwood Sanders, Hogs and Handling Equipment, Stetson-Ross Planers and Moulders, Ferrari Resaws and Tri-State Equipment.

Contact: Mike Simmons - Vice President Sales & Service
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KOCH KNIGHT

Koch Knight, LLC

A domestic manufacturer and global leader of ceramic media for Regenerative Thermal Oxidizers (RTO). Our media is designed to work in normal to your most challenging application environments. A mixed bed of our FLEXERAMIC® structured media and LPD® random media offers optimal heat transfer and full bed utilization while our GR (Glazed Resistant Alumina) material is produced for OSB Dryer and other applications for the wood products industry. We manufacture our ceramic media domestically and stock over 100,000 cubic feet at our East Canton, Ohio facility at any given time to accommodate current and future customers for quick response and short lead times.

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www.kochknight.com



KTC Panelboard Engineering

"Great projects start here." Expertise, experience, and proven track record second to none. Our staff has designed 24 greenfield plants and completed over 600 projects in the engineered wood industry over the past 30 years. KTC utilizes proven methodology to design machinery and processes while supporting the project management team with accurate budgets and schedules. We are now taking the risks out of projects with Dynamic Process Modelling and Advanced Project Tracking technology.

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LIMAB

LIMAB supplies non-contact laser measuring systems for composite panels and engineered wood products, including thickness and squareness measurements, and blow detections on panels.

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Lonza Wood Protection, Inc.

Lonza Wood Protection is a global leader in the development and supply of innovative technologies for the treatment of wood. Lonza's technologies improve the performance of wood products, making them resistant to termites, fungi, fire, mold and moisture. Lonza manufactures and supplies many of the highest quality and well-known wood protection products, including its Wolman® line of preservatives, Sillbor® borate treatments, Chemonite® ACZA industrial preservatives, Dricon® fire retardants, FrameGuard® and Wolman® non-pressure mold inhibition and preservative products and the Diacon Mycostat® and Antiblu® antisapstain lines. Together with its New Zealand-based affiliate, Zelan Ltd, Lonza offers formulations specifically designed for the treatment of engineered wood. With global operations and an expansive offering of services and expertise, Lonza is dedicated to the success of its customers.

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Matthews Marking Systems

Matthews Marking Systems, established in 1850, is a leading supplier of marking and coding equipment for the engineered wood and building products industries. Matthews supplies ink jet printing solutions for applications including grade marking, nail patterns, traceability and large format logo printing. We also offer a variety of inks, specific to the wood industry, including water based, fast dry and VOC free.

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www.matthewsmarking.com

McLube

Mold Release, Anti-Tack and Lubrication

McLube Division, McGee Industries, Inc.

McGee Industries' McLube Division has manufactured high-technology mold releases agents and industrial lubricants since 1954, including water/solvent-based release agents for the rubber, plastics, composite, wood fiber composite/panel pressing, concrete and stone veneer and polyurethane markets, antitack coatings for hundreds of industrial applications and a full line of Moly lubricants (Moly Lube), PTFE lubricants oils, greases and dry film aerosol and bulk containers lubricants. Lines include antistick coatings, rubber lubricants, antiseize compounds, cleaners and protective coatings. Through six decades of innovation, we've earned an international reputation for performance and worldwide industry recognition as expert problem solvers. Specialists in assessing complex processes, unusual conditions and developing working solutions.

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www.mcclube.com

meinan®

Meinan Machinery Works, Inc.

Established in 1953 in Japan, Meinan develops and manufactures innovative machinery for veneer and plywood production, and holds hundreds of worldwide patents. Meinan's revolutionary "spindleless" lathe drives logs on their circumference with spiked discs instead of spindles, resulting in better veneer quality, higher yield, and extremely close thickness tolerance. The lathe is part of an automatic veneer peeling line featuring automatic stacking and green composing of random strips into full veneer sheets to save labor costs and increase dryer utilization. Meinan also manufactures scarf composers, grading systems, automatic layup lines, and sanders. Represented in USA by Merritt Machinery, LLC in Lockport, NY.

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U.S. Representative: Merritt Machinery, LLC
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www.merrittmachinery.com



Mereen-Johnson LLC

Mereen-Johnson has been setting the standard for the woodworking and engineered materials industries since 1905 and offers a complete line of Gang Rip Saws, Profiling Machines, Cross Cutting Equipment, Sizing Systems, I-Joist equipment, and related material handling designed for reliable, high speed production with minimal maintenance. Mereen-Johnson also offers a complete line of solid wood processing equipment such as fixed arbor and shifting blade straight line multiple Rip Saws, Rough Mill Optimizing and Material Handling, Moulders, Single and Double End Tenoners, CNC controlled Dovetailers, and Box Clamps.

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www.mereen-johnson.com



Metriguard Technologies Inc.

High-speed Metriguard veneer graders operate in LVL and structural plywood mills worldwide. Laboratories depend on Metriguard Panel Bending & Performance Testers to evaluate structural panels. The new Model 840 tests OSB used as I-joist web stock. For MSR/MEL lumber producers, Metriguard offers the Model 7200 for longitudinal installations and the Sonic Lumber Grader for transverse installation – both are compatible with scanners. The Model 312 Bending Proof Tester is a standard in MSR QC labs. With over 40 years in the engineered wood products business, Metriguard has the knowledge and equipment for grading and testing structural veneer, panels and lumber.

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Mid-South Engineering Company

Mid-South Engineering is a full service, consulting engineering firm that provides a broad range of professional engineering services. Our multi-disciplined staff has served government as well as industrial and commercial clients with a particular expertise within the forest products industry. Mid-South has offices in Hot Springs, Arkansas; Cary, North Carolina; and Orono, Maine. Established in 1969, MSECO has since grown steadily in knowledge and experience. Our services include Engineering, Project Development, Project Management, and Construction Services.

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www.mseco.com



Mill Machinery LLC

Mill Machinery is a provider of new and reconditioned machinery to the veneer and panel industries. Mill Machinery's inventory of production machinery includes veneer lathes, veneer stackers, dryers, plywood presses, sawlines, grade bins, panel feeders, sanders, hogs and related support equipment. Mill Machinery's Magnum line of new machinery includes press loading/unloading systems, press platens, hydraulic units, flying saws, panel feeders, panel stackers and conveyors.

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NESTEC, Inc.

NESTEC, Inc. is a turnkey provider of thermal oxidation systems for the wood products industry including regenerative thermal oxidizers (RTO) including on line bake out, regenerative catalytic oxidizers (RCO), process scrubbers, Wet Electrostatic Precipitators (WESP), duct design, secondary heat recovery, system upgrades, energy audits, inspections and parts. Our key staff of engineers has over 300 years of experience in the field of thermal oxidation and has participated in solving air emissions problems for the wood products industry since the early 1990's. Whether you need a new air pollution control system or require upgrades and improvements to an existing RTO-WESP system, NESTEC, Inc. is your best resource to ensure a successful project.

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Nicholson Manufacturing Ltd.

Industry Leader in ring debarking technology since 1948.

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www.debarking.com



Nondestructive Inspection Service

Nondestructive Inspection Service (N.I.S.) was incorporated in 1960. Since that time we have taken preventative maintenance to higher levels of predictive maintenance while saving our customers costly unpredictable down time, on all types of process equipment along the entire production line. We are the established leader in applying our knowledge of NDT and perfecting inspection procedures to exceed industry standards. In the case of wood processing and construction board plants we have developed, tested and implemented significant innovations on the standard inspection techniques to shrink costly inspection downtime and overcome the issues of inspecting difficult-to-reach parts of the equipment.

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OCI Melamine

OCI Melamine is a melamine crystal supplier. Melamine crystal is used in the manufacture of formaldehyde based resins commonly found in decorative surfaces, OSB, plywood and other panel products.

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Pallmann Industries, Inc.

For more than 100 years, Pallmann has designed and built size reduction machinery. Specializing in high-capacity, high-performance stranders, flakers, refiners and mill utilized by the engineered panel board industries.

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Panel Machinery & Controls, LLC

At Panel Machinery & Controls, our focus is to provide the most up to date and trouble free Equipment design, Servo Motion Control and Automation systems for the Engineered Wood Products Industry. Our engineering staff has years of experience in quality-designed and field proven equipment and controls for the Plywood Industry. We have service technicians experienced with hydraulic & electrical motion control, capable of on-site trouble shooting and programming of all brands of PLC's and motion controllers. We are a United Laboratories 508A certified panel shop experienced in custom panel design and fabrication.

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www.panelmachinerycontrols.com



Panel World Magazine / Hatton-Brown Publishers, Inc.

Panel World publishes six issues per year for a domestic and international readership with emphasis on mill project startup articles. Product coverage includes structural and non-structural wood products. Panel World also hosts the biennial Panel & Engineered Lumber International Conference & Expo (PELICE).

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Paneltech

Paneltech is a young and growing, forward-thinking company comprised of people who have common values and share a common goal... providing environmentally responsible leadership in manufacturing the highest quality green products for industry. Our panel overlays are designed for high performance end uses and superior processability. They are designed to increase the value of the wood products they cover by increasing their durability, enhancing their appearance, and creating uniform surfaces to enhance the products end use.

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Permapost

Permapost provides custom pressure treating solutions for engineered wood products used throughout the U.S.A. and Asia.

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PFS - HAWE Hydraulik

HAWE Hydraulik is a well-respected, German based company that recently acquired Pacific Fluid Systems, LLC. HAWE's primary business is providing high quality hydraulic components through modular design and energy efficient solutions. With the acquisition of PFS, HAWE has increased its offerings to provide complete hydraulic and electro-mechanical motion control systems. This partnership offers a full range of products from custom hydraulic units and custom hydraulic manifolds to complete hydraulic press systems.

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PMP Solutions

At PMP Solutions, we believe that manufacturing plants can significantly increase their profitability by gaining a better understanding of what is happening on the factory floor. Real-time access to production performance data, everywhere and for all, helps you meet budgets and keep customer commitments. By connecting machines, processes and people all together, our customers are able to react right away to process deviations and avoid productivity and quality losses. You've heard about Industry 4.0? Internet of Things? That's what we do and we will be pleased to help you take your operations to the next level. systems.

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Raute

Raute is Your Partner in Performance. Global expertise in wood products technology and innovation driven, Raute continually leads the market in developing cutting-edge advancements in the production of plywood, LVL, and engineered wood solutions. Raute provides profitable solutions for large mill-wide projects as well as individual process lines, line modernizations, and equipment upgrades

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REA JET

Because REA JET knows that real demands need real solutions, we continue to be a global leader of coding and marking equipment for the building materials industry. German engineered, our technology has been consistently designed and developed to withstand the demands of harsh production environments. Our extensive line of technology includes Large Character Ink Jet Printers (DOD), zero maintenance High Resolution Ink Jet (HP) printers as well as Laser and Spray Mark systems. Contact REA JET today to learn more about our products, capabilities and service offerings.

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Rockwell Automation

Innovative Industrial Automation. Rockwell Automation, the world's largest company dedicated to industrial automation and information, makes its customers more productive and the world more sustainable. Throughout the world, our flagship Allen-Bradley® and Rockwell Software® product brands are recognized for innovation and excellence.

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www.rockwellautomation.com



Samuel Packaging Systems Group

With over 50 years serving the lumber and forest products industry, Samuel Packaging Systems Group, offers their customers in the Engineered Wood industry a single source supply for all of their strapping and packaging requirements. Samuel's product line includes steel and plastic strapping, pneumatic and manual hand tools, seals, edge protection, stretchwrap, product identification equipment and fully automated strapping systems. Our industry leading VK-30 strapping head has been used in both new and retrofit applications to convert our customers from steel to polyester strapping. Samuel is a leader in strapping for engineered wood products, and had the first AAR approved polyester strapping.

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www.samuelstrapping.com



Sansin (The)

Backed by over 30 years of proven performance with large commercial, residential and mass timber wood buildings and structures, Sansin is the global leader in developing high-performance factory finishes that deliver the color, durability and performance that architects, engineers and builders can count on. From undercoats, treatments and preservatives to finishes and fire retardants, Sansin's Precision Coat line of products provide wood protection for a variety of substrates and engineered wood products, including cross-laminated timber, siding, OSB, glulam, millwork and timbers. Sansin continues to deliver environmentally friendly wood coatings that enhance performance without compromise.

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SASCO Chemical, A PSG Company

Polymer Solutions Group is an innovative manufacturer of proprietary and custom polymer additives, dispersions, and performance chemicals for the rubber, wood, consumer, construction, and medical industries. SASCO's TechKote® Release Agents, Additives, and Platen Conditioners are chemically formulated for all composite and structural panel applications. Together we strive to deliver customer-centric solutions that improve our customers' products, processes and performance.

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SEMCO

SEMCO helps businesses cut lighting energy cost by 60-75% through turnkey LED lighting retrofits. We obtain utility, state, and federal incentives to pay for a large percentage of the new lighting. We represent our customers and buy directly from leading US LED manufacturers, securing the best prices, the longest warranties, and the most effective lighting solutions. From design and layout to project management, we handle the entire lighting upgrade, creating a brighter, safer work environment and improved bottom line for our customers.

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Siempelkamp L.P.

The Siempelkamp Group of Companies are world leaders in the supply, installation and startup of equipment and complete production plants for the manufacture of wood based panel products, energy systems, dryer systems, panel handling and finishing systems.

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SIGNODE®

Signode Packaging Systems

Signode is a global manufacturer of steel and plastic strapping and the application equipment and accessory products for each. Our protective packaging systems for the Lumber and Panel Industries are centered around the material that ultimately secures loads for handling, shipping and storage — plastic or steel strapping. We offer a full range of application tools, equipment and accessories to complete your strapping system. Our Forest Products Industry sales, equipment service, customer service and engineering departments can help you design the optimum protective packaging system for your application.

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Dust control innovations.™

SonicAir

SonicAir is a progressive air-engineering firm that eliminates the problems with combustible dust through its line of SonicAir® fans. SonicAir Systems apply our proprietary and innovative BarrierAir™ technology, which delivers enterprise-wide continuous clean through robotic engineering design. Products create high velocity and high mass airflow to create an overhead barrier preventing combustible particles from accumulating on steel structures, pipes, ducts and process equipment. Solutions include an engineered and customized plan for every application since factories AND fugitive particles vary by the materials processed.

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SparTek Industries

SparTek Industries manufactures high quality machinery with the latest cutting edge technology for many industries including Plywood, LVL, Rubber and others. Today's high volume Plywood production Lay-Up Lines place an emphasis on efficiency. SparTek's lay-up lines, Hot and Cold Presses, Loading and Unloading equipment, Glue Application systems and other equipment are designed to meet these demands. Helping customers meet and exceed their production and operating goals is a driving force at SparTek. We are here to help you meet your goals and to do so requires innovative technology and machines designed to work at the highest operating speeds. Glue Application systems and other equipment are designed to meet these demands. Helping customers meet and exceed their production and operating goals is a driving force at Spar-Tek. We are here to help you meet your goals and to do so requires innovative technology and machines designed to work at the highest operating speeds.

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Spraying Systems Co.®

Spraying Systems Co.

Spraying Systems Co. is the world's leading manufacturer of spray technology equipment. Our offering includes a family of PanelSpray® systems for applying release agents, moisture, resin, wax or other various chemistries to wood substrate, mats, cauls or belts. These systems ensure the precise volume of fluid is applied even when operating conditions like wood throughput or line speed change. Our line also includes a PanelSpray System for precise nail marking on oriented strand board and the industry's largest selection of spray products for use in humidifying, marking, cleaning and coating operations. We serve our customers around the world from our 12 manufacturing facilities and 90 sales offices.

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steinemann

Total Surface Quality

Steinemann Technology USA, Inc.

Steinemann Technology USA offers comprehensive sanding solutions from sanding machines to sanding belts along with our patented Sprint platen quick-change inserts. We offer 24-hour technical service and expertise via our US-based Application Engineers. In addition, we carry a large inventory of spare parts in our Charlotte, NC facility.

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www.steinemannusa.com



Stratachem Solutions Group LP

Stratachem Solutions Group LP provides chemical solutions specifically for the wood products industry. With over 90 years of technical wood products experience, and a world class research and development group, we are prepared to take on tough process issues. We specialize in release agents for continuous and multi-opening presses, as well as environmental equipment chemical solutions to keep WESPs and RTOs running up to design capacities. We are dedicated to customer satisfaction and understand the importance maintaining the highest levels of process efficiency while decreasing the cost of manufacturing.

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Sweed Machinery, Inc.

Sweed is known in the industry as the superior choice for providing full veneer dryer infeed and outfeed systems, veneer saws, turners, and hoists. Sweed also specializes in all replacement parts for Raimann and Skoog patchers, and manufactures, sharpens and repairs patcher dies. Sweed provides the latest technology and exceptional craftsmanship; helping processors achieve higher production goals with less downtime. Based in Oregon, USA, Sweed offers unmatched quality, customer service, engineering and technical support.

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Taihei Machinery Works Ltd.

Taihei is a specialized manufacturer of veneer and plywood machinery, fully committed to the development and production of equipment that meets customer needs. We are driven by the goal of providing proprietary machinery that is second to none to our customers around the world. Taihei is the leading manufacturer of automatic knife grinding and honing machines. Other Taihei products include horizontal hot presses up to 140 openings, veneer jet dryers, veneer stackers, glue spreaders, reeling systems, and finger jointing equipment.

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Tebulo NA Ltd.

Tebulo provides the newest and most advanced technology for marking, labeling, and barcoding in the forestry industry. Tebulo uses robotics for stenciling sidewall identification as well as end striping and coding. One system for both applications – with availability to use multiple colors. Robots present high reliability and minimal maintenance. Our systems come with a guarantee to perform at over 99% reliability. Let your product stand out from the competition.

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TIP – The Industry Pivot Ltd.

TIP is a leading global technology company focused on generating game changing technologies to production lines of manufacturing sectors. With its wax technology, changing the way wax is handled in production lines and creating significant savings, TIP is trusted by the world's leading manufacturers to supply their new high-value innovative technologies.

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The Center for Renewable Carbon is a state-of-art research facility at The University of Tennessee. The CRC has nine faculty conducting research on forest products, sustainable biomaterials and bioenergy, <http://renewablecarbon.tennessee.edu/>. The laboratories include wood composite laboratory steam-injected presses, destructive testing lab, conditioning chambers, dry kiln laboratory and new laboratory capabilities for sustainable biomaterials preprocessing, pretreatment research, thermochemical and biochemical conversion, and product analysis. Also, unique analytical capabilities for nanotechnology sustainable biomaterials are available. The CRC has M.S. and Ph.D. concentrations in Sustainable Biomaterials and Wood Science Technology. The CRC provides world-class industry training programs in SPC/Lean, DOE, and data mining.

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USNR

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INFO FAIR 2017

Annual Exhibition Brings Together Industry Suppliers



Attendees of the 2017 EWTA Info Fair and APA Annual Meeting enjoy EWTA's Saturday evening Welcome Reception at the Hyatt Regency Resort and Spa in Huntington Beach, Calif. last October.

Engineered Wood Technology Association members met in Huntington Beach, Calif., Oct. 28-31 for the association's annual supplier exhibition. Info Fair is an opportunity for members to share ideas and network with others in the engineered wood

industry, and the event is held annually in conjunction with APA's Annual Meeting. This year, 85 EWTA member companies from around the world exhibited at the event, which was held at the Hyatt Regency Resort and Spa.

In addition to Info Fair, the annual extended weekend also provides an opportunity for both EWTA and APA members to attend APA-sponsored workshops, participate in roundtable discussions and listen to presentations

Continued page 51





Photo courtesy of APA



Photo courtesy of APA

EWTA members posed for the association's annual group photo.



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Continued from page 48

about association activities. Members also took part in numerous receptions, luncheons and sporting competitions, including the annual golf tournament, cripple coot shoot and Ole Sorenson Memorial Tennis Tournament. 

Happy Anniversary!

Info Fair 2018 Celebrates 25 Years

It's back to San Antonio, Texas, for the 2018 Info Fair event, where EWTA will be celebrating the supplier exhibition's 25th anniversary. The event will be held Oct. 27-30 at the La Cantera Resort & Spa in San Antonio, Texas. Registration opens

April 6. For information, visit www.engineeredwood.org and click on Events and Programs, or email coordinator Melinda Lilley at mlilley@engineeredwood.org



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SUPPLIER STANDOUTS

EWTA Supplier and Innovation Award Winners Honored

by Sheila Cain

Five EWTA member companies were honored during the Chairman's Dinner at the APA Annual Meeting in Huntington Beach, Calif., Oct. 30 for excellence in the industry. The companies were winners in EWTA's annual Supplier Awards program. The two-pronged program includes the Supplier of the Year Award (three categories) and the Innovation of the Year Award.

The Supplier of the Year Awards are based on the quality, service and delivery of EWTA member products and services

to APA member companies. Supplier of the Year Awards are presented for each of EWTA's membership categories: Equipment and Tooling, Materials and Supplies, and Consulting and Services. The Innovation of the Year Award recognizes a company providing a new technology, product or service that has been shown to reduce production costs, increase productivity, improve product quality, or in some other way provide a bottom line benefit to APA members.

The award winners are selected by votes of APA member representatives.



Photo courtesy of APA

Supplier of the Year and Innovation of the Year award winners take home trophies for their hard work.



Photo courtesy of APA

EWTA honored the winners of the 2017 EWTA Supplier of the Year Awards at the Chairman's Dinner during APA's Annual Meeting last October. From left: John Harrison, Willamette Valley Company (Materials/Supplies Category); Michael Colwell, KADANT Carmanah Design (Equipment/Tooling Category); Sam Pope, USNR (Innovation Award); Jim Enright, Pacific Woodtech Corp. and APA Board of Trustees vice-chairman; Tyler Casebeer, Sweed Machinery (Innovation Award); Rich Donnell, Panel World Magazine/Hatton Brown Publishers (Consulting/Services Category) and EWTA Managing Director Terry Kerwood.

WINNERS OF THE 2017 SUPPLIER OF THE YEAR AWARDS ARE:



EQUIPMENT/TOOLING CATEGORY

KADANT Carmanah Design

KADANT Carmanah provides leading edge technology and equipment to optimize fibre utilization for the production of wood-based panels. KADANT Carmanah's products include Smart-DISC Stranders, SmartRING Stranders, rotary debarkers and conveying/feeding equipment for the oriented strand board market. As a global leader in stranding technology, KADANT Carmanah holds 80 percent of this market share.



KADANT Carmanah employees (from left, Rob McNicol, Michael Colwell and Carlos Vieira) receive their Supplier of the Year Award in the Equipment/Tooling category from EWTA Managing Director Terry Kerwood.



MATERIALS/SUPPLIES CATEGORY

Willamette Valley Company

Willamette Valley Company manufactures epoxies, putties and urethanes for upgrading all wood substrates, and also makes a wide range of water-based coatings, primers and sealers. Willamette also makes many fillers and extenders for wood adhesives and plywood glues. Pretec, the company's equipment solutions division, specializes in the design and manufacture of advanced fluid systems and the integration of robotic application systems.



Willamette Valley Company's Tony Vuksich (left) and John Harrison (far right) receive their company's Supplier of the Year award in the Materials/Supplies category from EWTA Managing Director Terry Kerwood.



CONSULTING/SERVICES CATEGORY

Panel World Magazine/Hatton Brown Publishers

Panel World publishes six issues per year for a domestic and international readership with emphasis on mill project startup articles. Product coverage includes structural and non-structural wood products. Panel World also hosts the biennial Panel & Engineered Lumber International Conference & Expo (PELICE).



EWTA Managing Director Terry Kerwood congratulates Rich Donnell with Panel World Magazine/Hatton Brown Publishers for his company's win in the Consulting/Services category.

TWO COMPANIES TIED TO CLAIM THE INNOVATION OF THE YEAR AWARD:



Sweed Machinery: Vacuum Feeder Peel Cups

Sweed's new Vacuum Feeder Peel Cups use a patent-pending approach to grip and feed green veneer into high-speed dryers. This method reduces feeding multiple veneer sheets, known as "doubles." Instead of using traditional vacuum cups that pick the veneer straight up while keeping the sheet flat, Sweed's Peel Cups lift the sheet from the outside edges first, then pull it into the dryer tipple feeder. This process mimics an operator's efforts to separate two sheets from one another if they become stuck.



Sweed Machinery CEO Tyler Casebeer shakes hands with EWTA Managing Director Terry Kerwood.



USNR: Cross Laminated Timber Press

USNR's new modular press for the manufacture of cross laminated timber panels features the use of compressed air instead of hydraulics, which sets it apart from other CLT presses. Once the CLT panel is fed into the press, a set of pneumatic cylinders applies pressure from the sides to ensure minimal gaps between core materials within a given layer. Meanwhile, a set of channels carrying eight, large-diameter pneumatic hoses is lowered to rest atop the CLT panel. Once the panel is configured correctly, the hoses are brought to pressure. The method is a more cost-effective and environmentally friendly one than the hydraulic alternative.



Sam Pope and his wife Carla accept the Supplier of the Year award on behalf of USNR.



REPAIR AND REMODELING

A Market Worth Watching

by Joe Elling

Market Focus:

REPAIR AND REMODELING

The largest and most cyclical end-use market for wood-based building materials is new residential construction, so it clearly deserves considerable analytical and media attention. New construction, however, doesn't tell the whole story. There are roughly 120 million occupied units in the U.S. that need to be maintained and modernized on an ongoing basis, and it is important for those in the wood products industry to understand what repair and remodeling means for the use of their products.

The last time the U.S. residential repair and remodeling market was closely analyzed by APA – *The Engineered Wood Association* was in 2009. The focus year was 2006, when the country was right in the middle of a housing boom. In 2017, APA published an update of the 2009 report, which focused on activity in the year 2014. The conclusions generated from the update provide a better understanding of where APA member products are used, and how professional remodelers and do-it-yourselfers have become more comfortable using improved structural panels and engineered wood products.

When the 2009 report was published, there were only four years of data available from the Census Bureau. The report focused on the types of projects undertaken by homeowners based on the American Housing Survey (released every two years). Since these surveys were conducted in the boom years, the conclusion drawn at the time was that home repair and remodeling was a rapid growth market. A wide array of interested parties made large investments based on that conviction. It is 10 years later

and there's now more data available that should allow us to better understand the cyclical nature of the projects homeowners undertake, especially those in which wood products are key inputs.

Repair and remodeling on the rise

Similar to new residential construction, repair and remodeling of the housing stock in the U.S. has been on an upward trend as part of the recovery from the Great Recession of 2007-2009. Sales at building material and garden equipment supply dealers have been on an upward path since 2013. Sales were up six percent in 2017 from 2016. Yet, they were still seven percent lower than the peak realized in 2005.

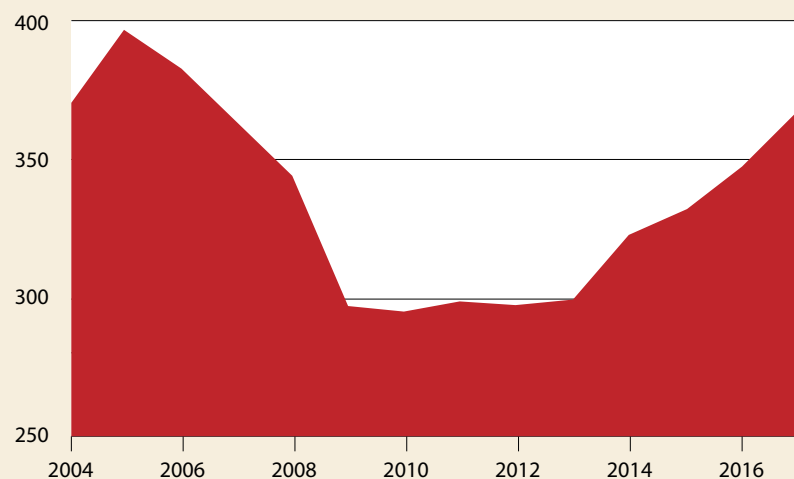
The data is dominated by the well-known big box stores, but wood products make up just a portion of their sales. The Census Bureau provides monthly estimates of the sales at these establishments, which can give us a qualitative feel for the trend in the repair and remodel

mark, but the data is insufficient to help us understand the mix of projects undertaken where wood products are critical inputs. That is why the detail from the American Housing Survey is so important. The most recent data available was released in 2017 for the survey year 2015. The research staff at the Harvard Joint Center for Housing Studies compiles the data in a manner that allows us to create consistently defined time series estimates to better understand the trends in projects that tend to be most wood products-intensive and estimate wood products use.

Discretionary projects: timing is key

Discretionary projects tend to be undertaken when homeowners are confident about their financial situation, credit is easily available, and they believe the project will add value to the home. Major repairs and replacements, on the other hand, usually require immediate attention and do not give the homeowner the luxury of time and extensive planning.

Sales at Building Materials and Garden Equipment Supplies Dealers
(Billions of 2015 dollars)

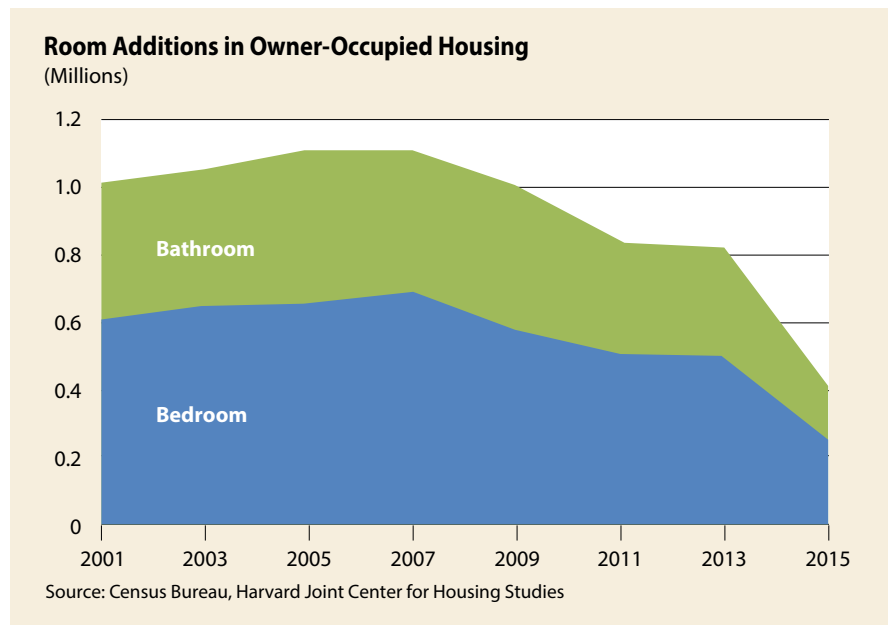
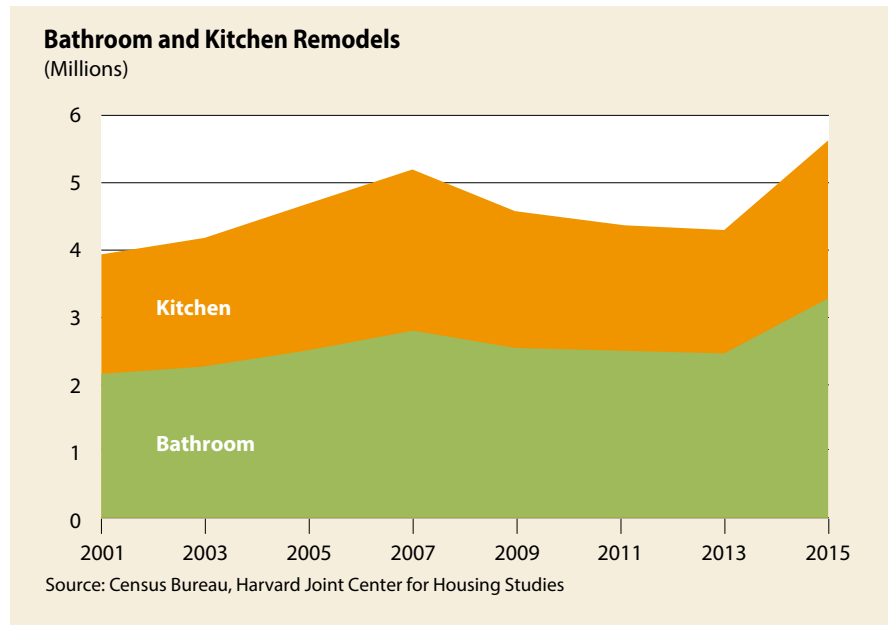


Source: Census Bureau, Bureau of Labor Statistics

The timing of discretionary projects closely follows the cycle in new home construction. Classic examples are bathroom and kitchen remodels. The number of remodels rose steadily from 2001 to 2007, in concert with rising home values and easy access to credit through home equity loans or withdrawing cash in a mortgage refinance to pay for the remodel. Remodels subsequently fell off as the economy went into recession, lending standards tightened and the drop in home values depleted equity that homeowners might have used to finance a remodel. The number of remodels bounced back in 2015 and exceeded the 2007 peak.

It should also be no surprise that average spending per remodel followed the same pattern as the number of remodels. Expenditures per kitchen remodel peaked in 2007 at \$12,270, an increase of almost 50 percent from 2003. Expenditures per kitchen remodel bottomed in 2013 at \$9,920, marking a drop of 19 percent from 2007. Expenditures per bathroom remodel averaged \$6,200 in 2005 and 2007, and then fell back to roughly \$5,000 for the years 2009 through 2013, and then rebounded to \$5,880 in 2015.

Another example of a discretionary project is the addition of a room or rooms to an existing home, which expands the square footage of living space and requires framing and sheathing applications. The most common examples are bedroom and bathroom additions, which, in some cases, are done in tandem. The number of bedroom and bathroom additions peaked in the years 2005-2007, but, in contrast to the remodels, continued to trend lower in 2015. Answers to the question of why additions fell by roughly 50 percent from 2013 to 2015 are largely speculative. One plausible answer is that undertaking a room addition in most municipalities requires a permit, and with many permitting offices understaffed, some owners became frustrated with delayed approvals. Another possible answer is that as new homes have trended up in size and amenities over time, additional space in the form of new bedrooms and bathrooms is less necessary than it was 10 years ago.



Emergency repairs

Unlike remodels or room additions, there are certain projects that – as much as homeowners want to delay—just cannot be put off for too long. Due to the nature of the needed repairs or replacements, they are usually expensive and require a professional. In terms of the number of projects done in a year and expense per project, roofing leads the way. The number of roofing projects was essentially unchanged from 2005 to 2009 and that number can be said to have been on

an upward trend through the first half of this decade. Expenditures per roofing project have essentially followed the same pattern as the number of roofing projects. From 2005 to 2009, expenditures per roofing project ran between \$5,100 and \$6,000. Since then, there has been an upward trend in expenditures to \$6,750 in 2015, which may reflect more expensive materials. However, given that material improvements have been made that promote a longer-lived or less maintenance-intensive roof, the increased expense is being overstated.

Re-siding a major portion or the entire home also showed much less sensitivity to economic conditions. Again, this makes sense in that a homeowner cannot afford to put off undertaking such a project for too long without risking more damage to the home that would require an even bigger expense down the road.

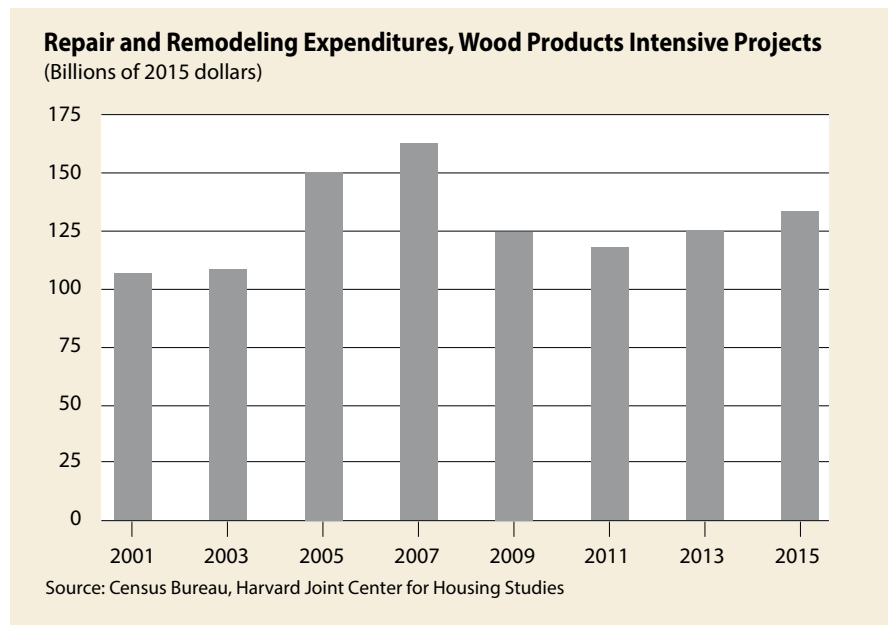
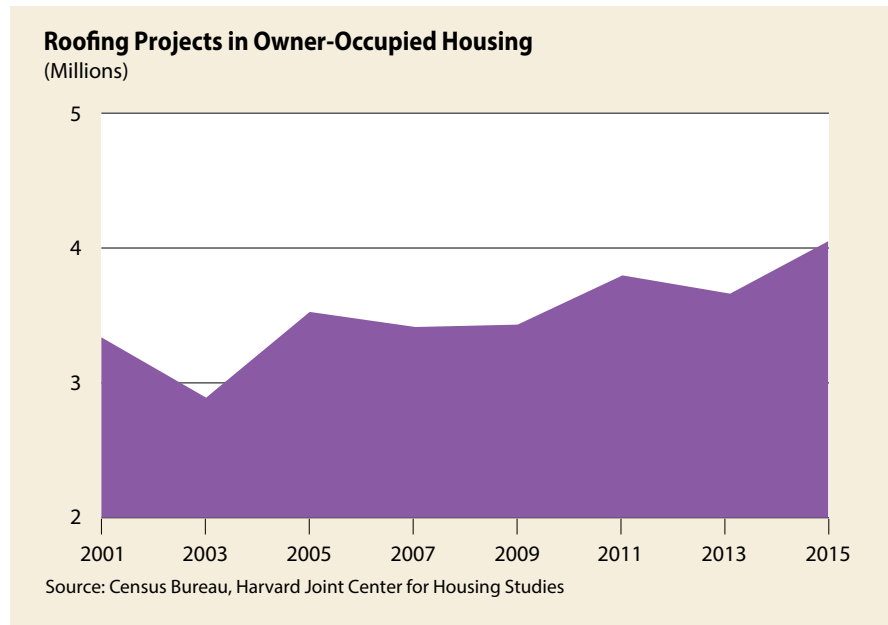
Summary of wood products intensive projects

Adding up the expenditures incurred for the projects reviewed and, including other smaller do-it-yourself projects deemed to be wood products-intensive, the estimated total for 2015 was \$133 billion, up 6.7 percent from 2013, but still 18 percent below the peak of 2007. The shortfall in the aggregate of the wood products-intensive projects relative to sales at building material and garden equipment supply dealers for the same years makes sense, as the economics of investing structurally in one's home has not been as compelling as it was before the onset of the Great Recession.

Since it is so difficult and expensive to fully track where wood products are utilized on an annual basis, these high-level indicators can be used to develop reasonable estimates of product usage in the repair and remodel sector. For example, APA estimates that structural panel use in residential repair and remodeling increased by roughly seven percent from 5.9 billion sq ft in 2015 to 6.3 billion sq ft in 2017. Yet, the 2017 estimate is still 17 percent below the peak years of 2005 to 2007, when structural panel use in this market was estimated at 7.6 billion sq ft.


Outlook for 2018 and beyond

Favorable economic conditions driving healthy consumer confidence suggest repair and remodeling activity will grow three percent in 2018. That number could go even higher, driven by the need to repair homes and apartment buildings damaged by hurricanes Harvey and Irma. The timing of when the repairs take place is dependent on how soon the funds, either from private insurance or government aid, are made available. Given the extent of the damage incurred, some of the spending could spill over into 2019. Housing units damaged from the severe



fires in California will tend to be total rebuilds on existing foundations, so those expenditures will be captured in the housing starts data.

Beyond the next two years, the likely growth path for residential repair and remodeling is to track at or less than real income growth, meaning something on the order of one-and-a-half to two percent per year. It is unclear if the tax law changes will have a meaningful impact on the remodeling side. The notion that the tax law changes could negatively im-

pect home prices at the high end suggests this could dissuade these people from investing as much in a remodel as prior to the change. 

Joe Elling is the director of market research for APA – The Engineered Wood Association. He can be reached at joe.elling@apawood.org. He contributes frequently to the Engineered Wood Journal. His most recent article analyzed the use of plywood and OSB in upholstered furniture in the Spring 2017 issue.



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THE FIGHT FOR FAIRNESS

Associations Educate States to Help Keep Wood Products Relevant in Energy Code

by Sheila Cain

When the 2012 version of the International Energy Conservation Code (IECC) was released, homebuilders and wood product manufacturers took notice. Updated every three years, the IECC serves as a guide that addresses the design of energy efficient buildings. While the new code increased energy efficiency requirements, it unfortunately also included a number of new mandates that negatively impacted the wood industry. Foremost among them was a questionable wall insulation requirement that favored the

use of foam wall sheathing over wood products and wood structural panel sheathing.

In reaction to the new energy code, APA coordinated a response supported by both member and non-member manufacturers and other wood product associations. The new coalition, the Coalition for Fair Energy Codes (CFEC) had a clear mission: to eliminate language in the code that favors certain building products over others and to level the energy code playing field, making sure that wood products continue to have fair and equal access to key markets.

Organized for Action

While foam sheathing can be an effective insulating material in residential construction, the IECC mandated that it be used in one of the code's compliance paths. This mandate applied to the nation's coldest climate zones, which includes many of the northern states. As such, it restricted the use of wood wall sheathing, which is used on 80 percent of the nation's single-family wall area (according to the latest Builders Practices Survey by the Home Innovation Research Lab). The energy code also included wall



Photo courtesy of APA

Two-by-six framing with wood structural panel sheathing is by far the most common wall assembly used by builders in northern climates.

insulation requirements in some warmer climate zones that were not cost-effective for the consumer and were not supported by the U.S. Department of Energy when they were included in the energy code. When foam is mandated, other building products – such as wood – lose out.

CFEC – the force behind the efforts to amend the code – is a collaborative effort between APA-The Engineered Wood Association and the American Wood Council, two trade groups that collectively represent the forest products industry. According to Tom Kositzky, CFEC executive director, the coalition's goals are to ensure that state adoption of newer energy codes do not limit or prevent market access for wood products by mandating specific products, as well as to ensure that future energy code versions are developed in a way that provides flexibility for use of all performance qualified building products and materials.

Push for Fairness in 2015, 2018 IECC

The codes are updated on three-year cycles, so CFEC's initial efforts targeted the 2015 IECC. With successes at both state and federal levels, the coalition next built on its momentum and turned to the 2018 IECC. CFEC was successful on 13 of 20 IECC proposal positions during the process that concluded in January 2017. The group also conducted an information campaign to encourage online governmental voters to support proposals that made the energy code more flexible and to oppose proposals that would reduce flexibility and negatively impact the wood industry. The Engineered Wood Technology Association contributed monetarily in support of these efforts.

An appealing aspect of the 2018 version of the code – and something that CFEC aggressively championed – is the increased flexibility that it provides builders. The added flexibility comes through two successful code change proposals that provide enough flexibility to permit wood wall sheathing use in all U.S. Climate Zones. These proposals do not diminish the stringency of the energy code, rather they recognize that builders who installed specific “above code” systems receive a credit for the increased energy savings. That credit can then be

APA's Support of Energy Efficient Design

As a strong champion of the wood products sector, APA has made considerable efforts to promote the use of wood as an important part of an energy efficient home.

EDUCATION:

APA has reached out to builders, designers and Home Energy Raters in an effort to educate them on the added flexibility the 2018 IECC allows for the use of structural panel wall sheathing. APA's The Performance Path to Energy Code Compliance brochure (search “Form R505” at apawood.org) offers an introduction to two of the most cost-effective ways to comply with the IECC.

PROMOTION:

APA is actively promoting wood structural panel wall systems that contribute to a home's energy efficiency. Examples include advanced framing, raised heel trusses, and air barrier systems. Each of these systems incorporates wood structural panels and gives builders affordable options to reduce energy loss in homes and meet the new, more stringent energy codes. APA offers publications and educational resources on each of these building systems.

RESEARCH:

Moisture research is being conducted by APA to help determine the most durable wall assemblies that incorporate a layer of continuous insulation (foam sheathing, etc.) over continuous wood structural panel sheathing. (See “Test Results” story on page 62)

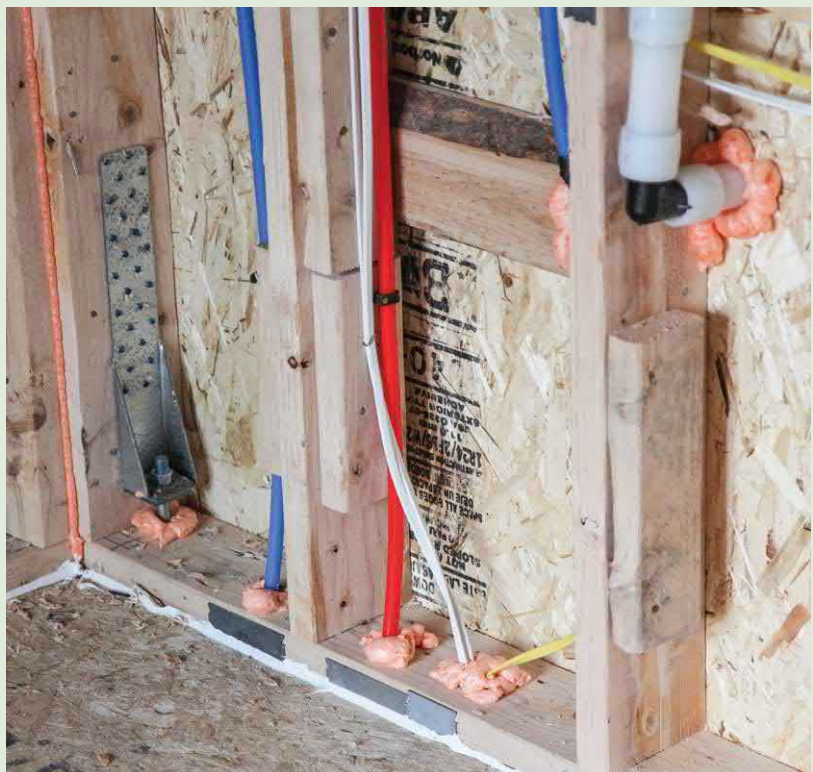


Photo courtesy of APA

APA promotes the many benefits of wood sheathing, including its use in an air barrier system.

applied to offset more expensive prescriptive insulation requirements elsewhere in the house. For example, if insulated ductwork in attics is also buried under the ceiling/attic insulation, instead of above

the attic insulation, an energy savings credit is earned that can be used to offset a less efficient system, like exterior walls that do not use prescriptively mandated foam sheathing.

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Gold

A premium connection level

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- Recognition in the *Engineered Wood Journal* on the gold sponsor page
- One entry into the Annual Meeting golf tournament or other recreational event
- Three issues EWTA Newsletter sponsorship

Silver

Get connected

Includes:

- One issue of EWTA Newsletter sponsorship
- Company name included on silver banner at the APA Annual Meeting/EWTA Info Fair
- A silver listing in the *Engineered Wood Journal*

Other Sponsorship Opportunities

- Supplier Awards
- Cripple Coot Shoot
- Golf Tournament



TEST RESULTS

APA Study Recommends Energy Efficient Wall Configurations

by Kingston Chow



Image courtesy of APA

APA's test hut, designed to find out how various types of wall assemblies respond to real-world conditions, includes eight different wall configurations, each built to expose one side to the natural outdoor environment and the other to a controlled indoor environment.

In an effort to determine how foam sheathing and other insulated sheathing products can safely work together with wood structural panel wall sheathing, APA's hygrothermal research program has been exploring the moisture performance of various types of split-insulated wood-framed wall assemblies.

Back in 2011, APA – *The Engineered Wood Association* partnered with the USDA Forest Products Laboratory and Washington State University to investigate the potential combination of wood structural panel sheathing and rigid foam plastic insulation as a solution for structural and energy conservation code requirements. To further validate the findings, APA built a test hut at its headquarters in Tacoma, Wash., in 2015 to find out how various types of wall assemblies respond to real-world conditions. The test hut included eight different wall configurations, each built to expose one side to the natural outdoor environment and the other to a controlled indoor environment. The walls were oriented facing

both the north and south directions (16 exposures in total) to evaluate the effects of sunlight and shade exposure. The walls were insulated with a number of different common exterior insulation products, including extruded polystyrene, expanded polystyrene and mineral wool insulation.

In 2017, the walls were subjected to additional simulated water leaks and were monitored carefully for temperature, humidity and wood moisture content as part of Phase II of the study. (Monetary support from the Engineered Wood Technology Association helped fund this portion of the study.) When the data was analyzed, researchers found that for the International Energy Conservation Code (IECC) Climate Zone 4-Marine environment (the climate in which the tests were conducted), an exterior split-insulated wood-framed wall, utilizing a vapor-open exterior insulation (such as mineral wool) and a high exterior-to-interior thermal resistance design ratio (such as 2x4 framing) is most beneficial in maximizing the drying potential and minimizing overall OSB


moisture content levels while in service.

The findings of the test hut study will be used to establish guidelines for durable wall assembly design when insulated sheathing is used over wood structural panel wall sheathing. Because builders have a strong preference for the many benefits of wood structural panel wall sheathing, a case can be made to promote the combined use of wood structural sheathing and insulated sheathing through association education programs. However, before that can happen, it is important that APA understand the risks associated with reduced drying potential in wall assemblies that also incorporate various insulated sheathing products.

Future phases will also include the creation of a risk index with the USDA Forest Products Laboratory in conjunction with their hygrothermal data collected within an IECC Climate Zone 6 environment. Coupling with analytical model analyses, this risk index is intended to be a guide for designers and builders when designing exterior walls for different climate environments.

WALL ASSEMBLIES

		1	2	3	4	5	6	7	8
Exterior Insulation Type	1-1/4" Mineral wool	X			X			X	
	1" XPS		X			X			X
	1-1/2" EPS			X			X		
WRB	House wrap	X	X	X	X	X	X	X	X
Wall Sheathing	7/16 Rated OSB	X	X	X	X	X	X	X	X
Vapor Retarder	Latex Paint	X	X	X				X	X
	6-mil Polyethylene				X	X	X		
Cavity Insulation	R-13 (2x4 Wall)	X	X	X	X	X	X		
	R-21 (2x6 Wall)							X	X
Interior Finish	1/2" Gypsum	X	X	X	X	X	X	X	X
Thermal Performance	Overall R-Value		17.24	18.12		17.24	18.12		21.09
	Overall U-Value		0.058	0.055		0.058	0.055		0.047

The detailed findings of Phase II of the hygrothermal study will be released in the form of a technical report available to APA and EWTA members, researchers, builders, and code officials in the near future. 

Kingston Chow is a building scientist for APA – The Engineered Wood Association. Based in Tacoma, Wash., he is a graduate of the British Columbia Institute of Technology, where he studied

civil engineering and building science. He can be reached at kingston.chow@apawood.org

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EWTA Bids Farewell to Chairman Nyblad

Mary Jo Nyblad, chairman of the Engineered Wood Technology Association's Advisory Committee, announced her retirement, effective March 31. Nyblad was chairman of the committee – and the first woman leader in EWTA's history – from 2014-2018.

Nyblad's resignation from the EWTA leadership role coincides with her retirement from Boise Cascade, where she held the role of vice president of commodity sales. She worked at Boise Cascade for 35 years, starting as a division buyer for the Building Materials Division and holding many positions through the years in sales and marketing.

Nyblad also served as the chairman of the APA Board of Trustees from 2011-2013 and held the distinction of being first female chairman in the association's 84-year history. She had been a member of the APA board since 2005, and served as the Marketing Advisory Committee chairman and board vice-chairman.



Photo courtesy of APA

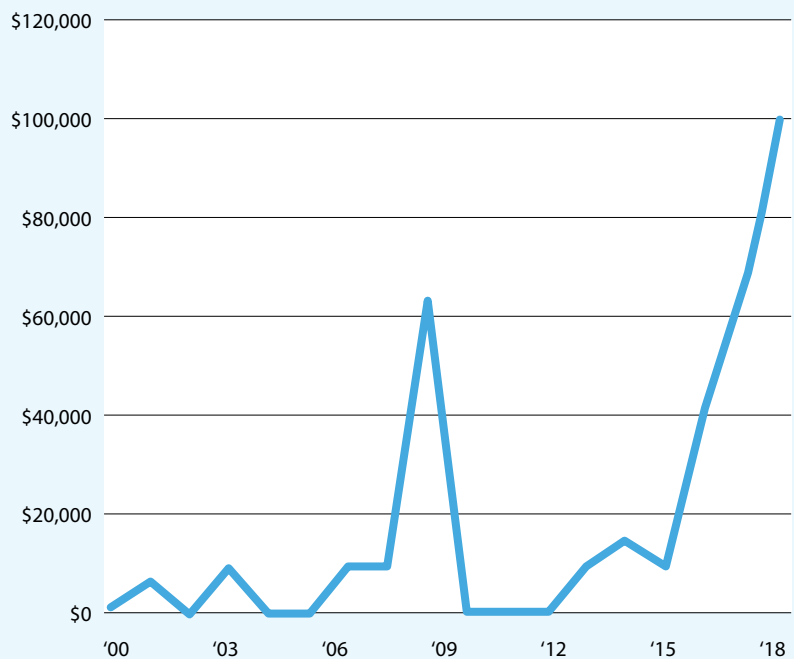
EWTA Allocates \$100,000 For APA Projects, Research

EWTA's Advisory Committee, at its fall meeting in Huntington Beach, Calif., voted to recommend an allocation of \$100,000 to fund five projects benefiting the engineered wood industry. The project proposals, presented by APA staff, included:

- **\$20,000** for a study on emerging technology for wall sheathing systems
- **\$26,000** for research on wood product usage in residential construction
- **\$10,000** towards production of the Build a Better Building commercial
- **\$20,000** to produce and post short educational videos
- **\$24,000** towards APA certification under the USDA BioPreferred program

The recommendation was forwarded to the APA Board of Trustees as part of the overall EWTA budget for 2018. Research contributions, made possible by EWTA member support, continue to trend in a positive direction with more than \$340,000 invested since 2000.

EWTA Research Allocation 2000-2018



APA, EWTA Members Speaking at PELICE

Several APA and EWTA members will be speaking at the biennial Panel & Engineered Lumber International Conference & Expo (PELICE) in Atlanta, Ga., April 13 and 14.

Roy O. Martin III, CEO, president and CFO of APA member company RoyO-Martin is one of the event's keynote speakers and will be addressing the startup of the company's new OSB plant in Corrigan, Texas, and the trends and economics of OSB and other wood products. Jim Salchenberg, director of engineering services with APA member company Roseburg Forest Products, is another keynote speaker. He will be discussing his company's new LVL operation under construction in Chester, S.C.

The Suppliers Keynote Session will feature presentations by two EWTA members. Bernd Bielfeldt, general manager of Dieffenbacher's Business Unit-Wood, will discuss the effect of digitalization and automation on the North American woodworking industry. David Jones, global vice-president of Hexion Inc., will be speaking on accelerating global wood products' growth.

In 2016, PELICE drew 450 representatives from three dozen wood products producer companies and 80 equipment exhibitors. The event is hosted by Panel World magazine and Georgia Research Institute.

EWTA Advisory Committee Recommends 2018 Budget

The EWTA Advisory Committee finalized the association's 2018 budget during its fall meeting. The budget is for income of \$475,600 and expenses of \$503,700, resulting in a year-end net deficit of \$28,100 and cash reserves of \$159,930. The deficit is due to increased allocation of funds towards APA research projects in light of ample cash reserves.

The proposed budget was subsequently approved by the APA Board of Trustees.

Info Fair Breaks Record With Sponsorships, Booths

Support of Info Fair continues to grow, with 72 sponsorships and 85 members exhibiting at EWTA's annual supplier exhibition last October.

This most recent event featured the highest number of paid sponsors and booth spaces in the history of the exhibition. The exhibition drew 85 exhibitors. Fourteen of these companies were Platinum sponsors: ALTEC Integrated Solutions Ltd., BRUKS Rockwood, Chem-Trend LP, CMA engineering Inc., COSTA Sanders LLC, Evertree, Huntsman Polyurethanes, Meinan Machinery Works Inc./Merritt Machinery LLC, Samuel Packaging Systems Group, Signode Packaging Systems, SparTek Industries, Sweed Machinery Inc., USNR, and Westmill Industries USA Corp.

Seventeen companies were Gold sponsors and 23 provided sponsorships at the Silver level.

Additional sponsorships included support for the Supplier Awards program, the golf tournament, the tennis tournament and the cripple coot shoot.

The next Info Fair supplier exhibition is Oct. 27-29 at the La Cantera Resort & Spa, Hill Country, in San Antonio, Texas.

EWTA Adds New Member To Advisory Committee

At its fall meeting in Huntington Beach, Calif., the EWTA Advisory Committee nominated Corey Farrens of member company SparTek to fill a vacant seat. The committee also extended the vice-chairman term of Tim Fisher through the spring 2018 meeting.



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Two Companies Join EWTA as New Members

Two companies have joined EWTA as new members since the last *Engineered Wood Journal* was published.

■ Hansen-Rice Inc.

(www.hansen-rice.com) of Nampa, Idaho, is a solutions-driven organization providing value to construction projects through pre-construction, in-house 3D design, general contracting and self-performed steel and thermal work. Marketing representative Tami McIntyre can be reached at tmcintyre@hansen-rice.com.

■ The Sansin Corporation

(www.sansin.com), is located in Strathroy, Ontario, Canada. Sansin's undercoats, sealers, stains, finishes and fire retardants provide wood protection for a variety of substrates and engineered wood products, including cross-laminated timber, siding, OSB, glulam, millwork and timbers. Executive Assistant Ann Van Dyk can be reached at ann@sansin.com.

GP Chemicals Names Dennis Easter as VP

Georgia-Pacific Chemicals has announced the promotion of Dennis Easter to vice president and general manager of thermosets. Formerly Business Manager - Wood Adhesives, Easter's role will now expand to include managing GPC's South American wood adhesive business, merchant formaldehyde sales and industrial resins business.

The industrial resins group includes products for composite, coatings, laminates, and insulation.

H.B. Fuller Announces New Company Purchase

H.B. Fuller Company recently announced that it has signed an agreement to purchase Royal Adhesives & Sealants, a manufacturer of high-value specialty adhesives and sealants headquartered in South Bend, Ind.

With this acquisition, H.B. Fuller will gain product technology and add people and skills that will result in a more

capable and dynamic company for customers and employees, the company said in a press release.

Wechsler Engineering Launches Equipment Company

Company representatives at Wechsler Engineering recently launched an independent equipment company called Wechsler Technologies.

For the past eight years, all specialized equipment was designed and delivered to Wechsler's industrial customers by Wechsler Engineering. Wechsler Technologies offers a variety of products including process heaters (fuel-fired and electric), thermal fluid safety components, and custom equipment.

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Globe Machine Celebrates 100th Year

Tacoma, Wash.-based Globe Machine Manufacturing Company celebrated 100 years in business last September with a party at the Maritime Museum in Tacoma.

Globe was developed in 1917 as an engineering and manufacturing company supplying machinery for the door and plywood industry. As the composite wood panel industry developed in the 1960s and 1970s, Globe was involved in producing lines for some of the early particleboard, MDF and wafer board plants. Later, Globe was influential in the development of the North American OSB and engineered wood industry.

Globe's history includes leading the development of process technology areas such as plywood manufacturing; wood I-joists and other engineered wood products; panel finishing and coating; and integrated automated storage and retrieval.

Globe Machine today employs 130 people.

Axalta Acquires Valspar's Wood Coating Business

Axalta Coating Systems recently announced that it plans to acquire Valspar's North American Industrial Wood Coatings business for \$420 million.

Axalta will acquire the personnel, both dedicated manufacturing sites, R&D assets and the underlying intellectual property of Valspar's North American Industrial Wood Coatings business.

Hexion Completes R&D Facility Expansion

Hexion Inc. recently completed an expansion of its technology center at its forest products complex in Edmonton, Alberta, Canada. The expanded research and development facility is focused on developing next generation resin chemistry for panel production that will complement the company's existing EcoBind lower emitting resin technology and build on the inherent flame, smoke and toxicity retardant properties of the company's current resin systems.

AkzoNobel Appoints New CEO

AkzoNobel announced that its chief executive officer, Ton Büchner, stepped down due to health reasons, and Thierry Vanlancker will serve as the company's new CEO. Vanlancker joined the company in 2016 and was most recently head of specialty chemicals at AkzoNobel.

Walker Industries Feted for Philanthropy

Walker Industries was recently honored by the Association of Fundraising Professionals, Golden Horseshoe chapter (Ontario, Canada) for its active participation

in the philanthropic community. Walker was named an "Outstanding Citizen" for its long history of giving back to the communities in which its employees work.

HT Group Ranked as Top Firm by Business Journal

HT Group recently announced that it has been named among the top firms in Austin by the *Austin Business Journal* in three separate categories: Temporary Staffing Firms, Contingency Search Firms and Retained Executive Search Firms. This is the 10th straight year The HT Group has been included as a top staffing and recruiting firm by the *Journal*.

CORRECTION

Thank You Platinum Sponsors

Due to an error in the presentation slides at the APA Annual Meeting's Monday night reception in Huntington Beach, Calif., last October, several EWTA Platinum-level sponsors were not recognized at the awards dinner. Those members inadvertently left off the list were:

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- **Evertree** (www.evertree-technologies.com)
- **Meinan Machinery Works Inc.** (www.merrittmachinery.com)
- **Samuel Packaging Systems Group** (www.samuelstrapping.com)
- **SparTek Industries** (www.spartek.com)

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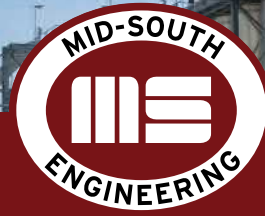
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- 11-12** Wood Bioenergy Conference & Expo, Atlanta, Ga., bioenergyshow.com
- 13-14** Panel and Engineered Lumber International Conference and Expo (PELICE), Atlanta, Ga., pelice-expo.com
- 22-24** American Wood Protection Association annual meeting, Seattle, Wash., www.awpa.com
- 22-25** Composite Panel Association Spring Meeting, Victoria, B.C., Canada, www.compositepanel.org

MAY

- 6-8** Hardwood Plywood and Veneer Association spring conference, Kiawah Island, S.C., www.hpva.org
- 8-12** Xylexpo 2018, Milan, Italy, www.xylexpo.com
- 9-10** Global Softwood Log and Lumber Conference, Vancouver, B.C., Canada, www.woodmarkets.com
- 10** Engineered Wood Technology Association's Spring Advisory Committee meeting, APA – *The Engineered Wood Association* headquarters, Tacoma, Wash. www.engineeredwood.org
- 18-19** Expo Richmond 2018 – 36th East Coast Logging and Equipment Exposition, Richmond, Va., www.exporichmond.com

JUNE

- 6-8** Canadian BioEconomy Conference and Exhibition, Prince George, B.C., Canada, bioeconomyconference.com
- 12-15** Forest Products Society 72nd International Convention, Madison, Wis., www.forestprod.org
- 21-23** American Institute of Architects Conference on Architecture 2018, New York City, N.Y., conferenceonarchitecture.com

AUGUST

- 20-23** 2018 World Conference on Timber Engineering, Seoul, Korea, <http://wcte2018.kr/home/>
- 22-25** International Woodworking Fair, Atlanta, Ga., www.iwfatlanta.com

SEPTEMBER

- 11-14** Furniture China 2018, Shanghai, China, www.furniture-china.cn
- 23-25** Composite Panel Association Fall Meeting, Nashville, Tenn., www.compositepanel.org
- 25-27** World Forestry Center's "Who Will Own the Forest?" conference, Portland, Ore., www.wwotf.org

OCTOBER

- 27-29** APA Annual Meeting and EWTA Info Fair, San Antonio, Texas, www.apawood.org, www.engineeredwood.org

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Letters to the editor are welcome and encouraged. Please include your name, company affiliation, address, and phone and fax numbers. Letters should be no longer than 300 words, and may be edited in accordance with space constraints or for clarity.

To suggest or submit stories:

Story ideas and submissions are welcome. Queries are suggested prior to submitting articles. Send to scain@engineeredwood.org. Writer guidelines can be found in the *Engineered Wood Journal* section of the EWTA website at www.engineeredwood.org.

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