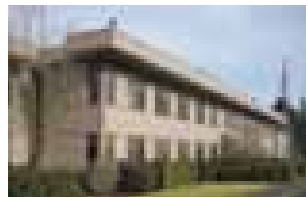


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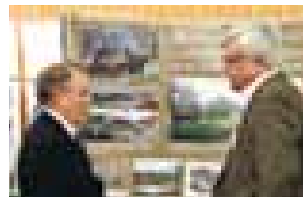
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TECHNICAL SUPPORT

APA Research Center Has Long History of Market-Driven Research and Member Services Delivery

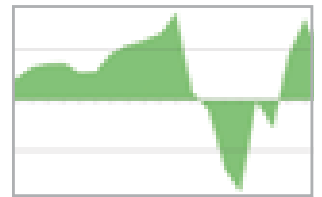
PAGE 10



ASSOCIATION FOCUS

Q&A with APA President Ed Elias

PAGE 16



THE HISTORY OF HOMEOWNERSHIP

Tumultuous Market May be Giving Way to Stabilized Rates

PAGE 22

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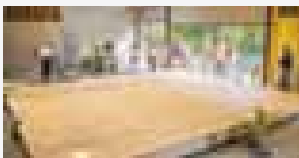
ENGINEEREDWOOD *Journal*

ENGINEERED WOOD JOURNAL
Volume 18, No. 1, Spring 2015

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About the Cover:
Representatives from APA member companies, trade associations, code evaluation agencies and research organizations witnessed I-joint diaphragm tests at the APA Research Center in August 2014. Photo courtesy of APA - The Engineered Wood Association See story on page 10



**STRENGTH THROUGH
CONNECTIONS**

departments

PRIMELINES	7
INDUSTRY CONNECTIONS	8
ASSOCIATION CONNECTIONS	44
MEMBER CONNECTIONS	46
UPCOMING CONNECTIONS	49
READER SERVICES	49
ADVERTISER CONNECTIONS	50

features

TECHNICAL SUPPORT	10
<i>APA Research Center Has Long History of Market-Driven Research and Member Services Delivery</i>	
ASSOCIATION FOCUS	16
<i>Q&A with APA President Ed Elias</i>	
SUPPLIER SUPERSTARS	20
<i>EWTA Supplier and Innovation Award Winners Honored</i>	
THE HISTORY OF HOMEOWNERSHIP	22
<i>Tumultuous Market May be Giving Way to Stabilized Rates</i>	
STAYING THE COURSE	26
<i>Business Outlook Survey Suggests Continued Optimism</i>	
EWTA 2015 MEMBERSHIP DIRECTORY	29
TWICE AS NICE	40
<i>Associations Partner to Present Upcoming Conference</i>	
IMPLEMENTING A SAFETY CULTURE	42
<i>Does Your Safety Strategy Contribute To or Constrict Business Strategy?</i>	



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PRIME *lines*

In this issue...

At first glance, APA's Tacoma Research Center is quite unassuming. The beige, two-story structure along South 19th Street has changed little in the past forty-some years, but the research activities that happen inside have helped provide important technical information to the engineered wood industry since it opened in 1969. Here, APA staff conduct considerable wall sheathing studies along with research of LVL, I-joists, structural insulated panels and other engineered wood products. Jack Merry, APA's retired communications director and former editor of the *Engineered Wood Journal* explores the myriad ways APA's talented technicians are advancing the industry. His story begins on page 10.

This month's *Journal* also features an interview with APA President Ed Elias. In our Q&A, he expands on some of the issues he discussed at APA's Annual Meeting in San Antonio last fall, such as expanding strategic alliances with industry partners; efforts to develop and maintain markets; and new opportunities realized resulting from trade missions into the international market. Elias' interview starts on page 16.

Also in this issue you'll find the results of the annual EWTA Business Outlook Survey, where members rate their past, current and future successes. The survey shows that members have been generally pleased, with 69 percent of responding members reporting improvement in their companies' wood-related businesses in 2014. The future looks bright as well: seventy-three percent expect business to improve this year. Survey results are listed in the "Staying the Course" feature beginning on page 26.

In this issue of the *Journal*, we editorially recognize the Supplier Award winners, who were honored this past October at the APA Annual Meeting's Chairman's Dinner. Congratulations to our winners. See who they are on page 20.

Flip to the center of the magazine to find complete listings of EWTA's member companies. If the section feels a bit thicker, there's good reason: EWTA's membership is the highest it has been in the association's history. At press time, we had 102 members. Take some time to look through the directory - it's a great networking piece, and something to keep handy throughout the year.

I hope you enjoy this issue of the *Engineered Wood Journal*!



Sheila Cain
scain@engineeredwood.org

Three Companies Join APA

The APA Board of Trustees has approved membership for three companies: Alamco Wood Products LLC, a glulam manufacturer located in Albert Lea, Minn.; South Everson Lumber Company (a division of Terminal Forest Products), a manufacturer of structural glulam posts located in Everson, Wash.; and Boozer Laminated Wood Products, a producer of high-strength southern yellow pine glulam located in Anniston, Ala.

The Alamco plant last operated as an APA member in 2007. Alamco is one of the oldest and longest operating glulam manufacturing facilities in North America. The company's history dates back to 1938, when production started under Rilco Laminated Products Inc., in Blue Earth, Minn. In 1960, Rilco Laminated Products Inc., became a Weyerhaeuser subsidiary. Weyerhaeuser operated the Albert Lea plant until 1982, when ownership was assumed by 10 long-term

employees and the facility was reopened as ALAMCO Wood Products Inc. In May 2009, the Bell Lumber & Pole Company successfully completed an acquisition of the Alamco facility, renaming it Alamco Wood Products LLC. Alamco is a manufacturer of structural glued laminated timber beams and arches for uses that include churches, schools, trusses, park shelters, bridges and utility poles.

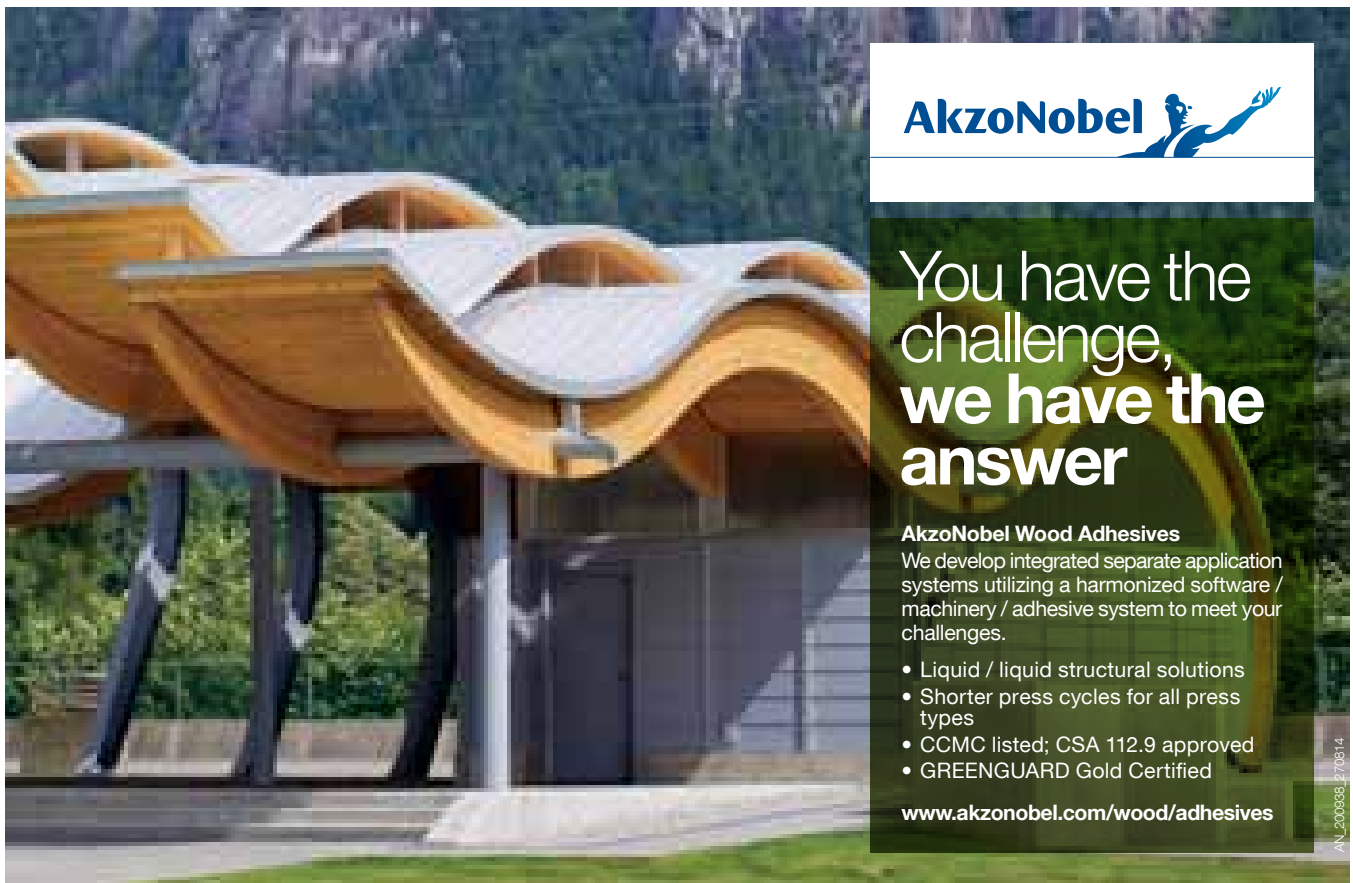
Terminal Forest Products maintains a manufacturing facility located just south of the Canadian border. TFP is a forest products company that is recognized as an industry leader in the production and branding of premium Western Red Cedar products from trees grown on the west coast of British Columbia. TFP manufactures structural cedar glulam posts.


Boozer was founded in the mid 1930s by Elbert and Hinton Boozer and got its start in the production of bridge timbers for the U.S. government.

"We are pleased to welcome these glulam manufacturers to APA and look forward to bringing APA's full range of services to their operations," said APA President Ed Elias. "APA now represents more than 90 percent of North American glulam manufacturing capacity and brings a strong voice to this important segment of our engineered wood industry."

Two New Trustees Elected to APA Board

Jim Enright, president and CEO of Pacific Woodtech Corp. in Burlington, Wash.; and Adrian Blocker, senior vice president, Wood Products at Weyerhaeuser in Federal Way, Wash., have been elected to the APA Board of Trustees. Enright fills the board position vacated by Dave DeWitte, former CEO of Pacific Woodtech, who retired in February. Blocker fills the



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position vacated by David Graham, who has transferred to a new position with Weyerhaeuser.

Enright has served previously on the APA Board of Trustees, including a short time as chairman. He's a member of the APA Marketing Advisory Committee and a past chairman, and currently chairman of the APA I-Joist/SCL Management Committee. Blocker directed the Southern Forest Products Association before serving for a short time as CEO of the Wood Products Council. He is also a current member of the Softwood Lumber Board.

BJ Yeh Named Chairman of CSA A369

Dr. BJ Yeh, Director of Technical Services for APA, has been named chairman of the Canadian Standards Association (CSA) A369 Technical Committee on Wood-Based Panels, which is responsible for four national consensus standards on plywood and OSB in Canada: CSA O121 Canadian Douglas Fir Plywood, CSA O151 Canadian Softwood Plywood, CSA O153 Poplar Plywood, and CSA O325 Construction Sheathing.

APA is a sponsor of CSA standards on wood structural panels and structural glued laminated timber (CSA O122 and O177, which are under the jurisdiction of CSA A370 Technical Committee on Solid and Engineered Wood Products). Yeh is a voting member on CSA O86 Engineering Design in Wood, chair of ASTM D07.02 Committee on Lumber and Engineered Wood Products, secretariat of seven American National Standards under American National Standards Institute (ANSI), and convener of ISO Technical Committee TC165 Working Group 2 on Structural Glued Laminated Elements.

In Memoriam

Annette McNeal Clark

Annette McNeal Clark, 88, of Shubuta, Miss., passed away Feb. 18. For many years she was the president of Mississippi Laminators, an APA-member glulam manufacturer. She is survived by her son, Charles Clark; daughters, Elizabeth Henderson and Mary Douglas; a brother; nine grandchildren and four great grandchildren.

William Stimpson

William "Billy" Stimpson, 94, died January 17, 2015, in Mobile, Ala. Mr. Stimpson enjoyed a lifelong career in the lumber manufacturing/timber business, retiring from Gulf Lumber in 1992 as its board's chairman. Throughout his career, Mr. Stimpson was very involved in industry trade associations, including the Alabama Forestry Association (president, 1967), Alabama Forestry Commission (1969-1985; chairman, 1972), Southern Forest Products Association (president, 1977) and the National Forest Products Association (president, 1982; chairman, 1983). He is survived by his daughter and three sons, 15 grandchildren and 24 great-grandchildren.

Rod Swanson

Rod Swanson, the co-founder of Oregon timber company Swanson Group Inc., died on Jan. 16 at the age of 91. Mr. Swanson, his brothers and others bought an existing mill in Glendale, Ore., in 1951 after returning from serving in World War II, naming it Superior Lumber Co. In the ensuing decades, the company grew through expansion and acquisitions into Swanson Group Inc., still headquartered in Glendale. Mr. Swanson is survived by his wife, six children, 17 grandchildren, and 14 great-grandchildren.

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TECHNICAL SUPPORT

APA Research Center Has Long History of Market-Driven Research and Member Services Delivery

by Jack Merry

With an 80 percent share of today's single-family wall sheathing market, the wood structural panel industry has good reason to be both optimistic and guarded. There is still plenty of potential market share to gain — more than half a billion square feet (3/8" basis). But there is also lots of volume potentially to lose—approximately 2.2 billion feet.

This opportunity and risk equation helps explain both the historical and current priority for significant wall sheathing research and development efforts at APA — The Engineered Wood Association's Tacoma Research Center.

Opened in 1969, the 42,000-sq-ft facility houses a multi-talented APA Technical Services Division staff and wide array of product and systems testing equipment that together provide the capability for both leading-edge market-

driven research and comprehensive APA member services delivery. (APA also operates a testing laboratory in Atlanta, Ga.)

Wall sheathing research commands considerable attention today, noted APA Technical Services Division Director Borjen (BJ) Yeh, because of the concerted efforts of competing products, particularly those of the foam plastic insulation sheathing industry, to amend the International Energy Conservation Code (IECC) in ways that threaten engineered wood market share. Those threats require ongoing development of technical data in support of existing and innovative new wood wall construction systems, Yeh said.

There is also significant need for credible test and engineering data in support of wood wall systems in high wind and seismic zones, Yeh added, as well as for research as a basis for durable wood wall

construction recommendations.

Current and recent test programs in support of the panel wall sheathing market include:

- **Force transfer around openings**, for the purpose of identifying a rational design methodology that can closely predict the lateral force distribution around door and window openings in shear walls under seismic and wind loads.
- **Portal frame walls**, to address the demand for structurally efficient narrow wall segments adjacent to wall openings through both prescriptive bracing wall and engineered shear wall solutions with and without hold-down devices.
- **Hygrothermal performance of foam over wood structural panel sheathing**, designed to evaluate the performance of wood structural panel and foam



Opened in 1969, APA's 42,000-sq-ft Research Center in Tacoma, Wash., houses APA's Technical Services Division staff and a wide array of product and systems testing equipment.

Photo courtesy of APA — The Engineered Wood Association

plastic insulation in wall applications in accordance with the structural and energy conservation requirements of U.S. building codes.

- **Narrow wall bracing**, which gives builders the architectural flexibility of 16-inch-wide narrow wall segments, the structural integrity of code-approved bracing, and the ease of site-built construction.
- **Simplified wall bracing**, to streamline the relevant provisions in the International Residential Code (IRC) in order to make them easier to understand and apply, thereby facilitating greater use of wood structural panels.
- **Wood structural panels as a nail base for claddings**, to strengthen the value proposition of wood structural panel wall sheathing by demonstrating its superior capabilities as a stand-alone nail base for exterior wall claddings.
- **Advanced framing method** utilizing 2x6 wall framing that is aligned with roof and floor members in conjunction with wood structural panel sheathing as a means to preserve the existing high market share of plywood and OSB wall sheathing while meeting increasingly stringent energy code conservation requirements.

Research in Action

The results of the technical staff's wall sheathing research are frequently used by the Coalition for Fair Energy Codes (CFEC), a nonprofit alliance of the wood products and allied industries established to help assure that wood products are not unfairly disadvantaged in energy codes and standards, particularly at the state level. Organized under the leadership of APA, CFEC supports technically credible and cost-effective energy conservation; the use of the best available building science and technical data in support of the code development process; and construction industry options, alternatives and trade-offs for meeting conservation targets.

While the wall sheathing market represents a significant share of the technical staff's research activities, numerous other product and systems research projects also are under way at any given time. Among those at present, for example, are:



APA full-scale (24-ft x 24-ft) diaphragm test equipment is shown at the APA Research Center.

- **Glulam in-grade testing**, a multi-year project to develop a full-scale performance database — based on predominant wood species and product from multiple manufacturing facilities — for confirmation of critical glulam design values.
- **Laminated veneer lumber (LVL) hole testing**, to determine appropriate LVL beam design values under various hole size and location scenarios.
- **I-joist diaphragm testing**, to evaluate the performance of light-frame wood diaphragms utilizing wood I-joists and wood structural panel floor sheathing, and covering various diaphragm configurations and cases stipulated in the building code.
- **Structural insulated panel (SIP) creep performance study**, to better understand the long-term performance of SIP panels in service.

Aside from a 5,000-sq-ft addition in 2006 to accommodate installation of full-scale house and diaphragm performance test equipment, APA's Research Center appears little changed on the outside from its original shape and look. Inside, however, a steady evolution of technology takes place in keeping with the ongoing introduction of new products, applications, market needs and regulatory requirements.

When the facility was dedicated 45 years ago, for example, the facility's entire

Research Center Test Equipment at a Glance

The APA Research Center is among the best equipped wood products industry research and testing facilities in North America. Following is a partial list of product and systems testing equipment:

- Full-scale (24 feet x 24 feet) diaphragm test machine
- Full-scale (10 feet x 24 feet) cyclic shear wall test machine
- Full-scale (10 feet x 10 feet) bi-axial combined shear and uplift test machine
- Two high-capacity and six desktop universal test machines
- Uniform load test machine
- Floor test machine
- Full-scale tension test machine
- Panel bending machine
- Three panel concentrated and impact load test machines
- Panel shear (two-rail) test machine
- Full-scale (70-foot-long) beam test machine
- Four creep test machines
- Formaldehyde test lab
- Three moisture conditioning chambers

focus was on softwood plywood grades and uses. Today, as the test program examples noted above suggest, research, development and testing encompass a much wider array of APA member manufacturer products, including oriented strand board, glulam timber, wood I-joists and structural composite lumber. Test equipment and methodologies have changed accordingly. (See the sidebar story on previous page for a list of current laboratory test equipment.)

Serving the Members

Another primary function of the Research Center staff is delivery of product-related member services, which number in the hundreds each year. These include, for example, new product qualifications, proprietary product testing and quarterly product verification tests.

One such member service is the issuance of APA Product Reports, which document that an APA member company's product conforms to building codes and the provisions of national, international or recognized industry standards. The reports help speed the introduction of member products to the marketplace by alleviating the process for lengthy and expensive code evaluation reports. Some 80 APA Product Reports have been issued and maintained to date, including fire-rated assembly reports based on a recent APA scope expansion under ISO/IEC 17065 certification body accreditation.

With the success of Product Reports, APA technical staff subsequently developed a series of APA Systems Reports, which facilitate the use of engineered wood systems that may not be referenced in building codes but that can be used for compliance with code provisions. The staff also produces on behalf of its members Green Verification Reports, which verify to design professionals and building officials that an APA member product is eligible for points under recognized national green building standards.

Numerous means are employed in collaboration with APA's Market Communications and Field Services Divisions to disseminate the results of APA research and laboratory testing to builders, architects, designers, engineers, industrial fabricators, code officials, regulatory

agencies and other key audiences. These include:

- **Product and application literature** — a library of some 500 titles available as PDF downloads and in some cases in hard copy form. The APA publications library encompasses product guides, design and construction guides, product standards, case studies, technical notes, research reports, industrial user

guides, international language titles, and the aforementioned product, system and green verification reports.

- **Websites**, including separate URLs for:
 - ApaCAD.org, a resource for building designers and construction professionals in search of computer aided design (CAD) details for wood frame construction.



APA full-scale bending test equipment tests glulam, I-joist, and structural composite lumber.

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- WoodUniversity.org, an online training program for engineered wood product users and specifiers.
- apawood.org/walls, a comprehensive site on wood structural panel wall systems for architects, designers, engineers, builders, code officials and others.
- PerformancePanels.com, devoted exclusively to structural wood panels in industrial market applications.
- BuildABetterHome.org, dedicated to improving the design and construction of moisture-resistant building envelopes.
- apawood.org/i-joist, a site providing wood I-joist design and construction recommendations.
- apawood.org/glulam, devoted to glulam beam design and construction applications.
- **Product Support Help Desk**, a highly trained two-person call center that provides answers to thousands of inquiries each year from users, specifiers, dealers, code officials and others.
- **Field seminars and webinars**, covering residential and nonresidential construction market applications, particularly code-related issues and design/construction solutions.

Representing the Industry

Still another key function of APA's Research Center technical staff is to advance and maintain recognition of member products in product and performance standards and in building codes around the world. APA, by virtue of its technical capabilities, serves as the sponsor of the U.S. Product Standard PS 1 for Structural Plywood, the consensus softwood plywood standard, and Voluntary Product Standard PS 2, the U.S. harmonized performance standard for wood structural panels developed under the U.S.-Canada Free Trade Agreement. In addition, the Association in the 1990s developed a voluntary performance standard (PRI-400) for wood I-joists.

APA also is accredited by the American National Standards Institute (ANSI) as a standards developer and in that capacity has published or is currently working on seven ANSI national consen-

sus standards for glued laminated timber, adhesives, engineered wood siding, cross-laminated timber, engineered wood rim boards and performance rated structural insulated panel (SIP) walls.

Technical staff each year participates in the activities of numerous building code, standards, material testing and engineering design committees. APA engineers and support staff, for example, work closely with the International Code Council Evaluation Service (ICC-ES) to publish Joint Evaluation Reports for APA

member products, chair and serve on several ASTM International, Canadian Standards Association (CSA) and ISO engineered wood product committees, provide technical support and testify on behalf of member manufacturer products at building code hearings, and collaborate with allied organizations and industries in the development of research and design data supporting the acceptance of engineered wood products by regulatory agencies and in the marketplace.



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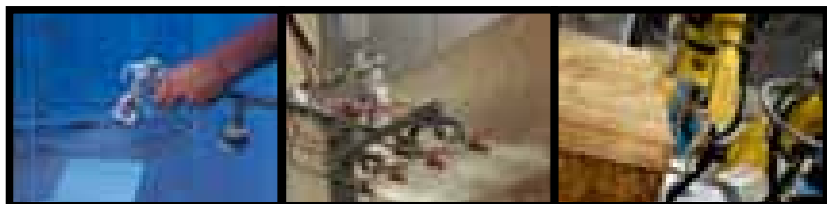


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Quality Certification:

The Other Side of the Research Center Story

The APA Research Center also houses the Tacoma headquarters' Quality Services Division (QSD) staff, which together with quality auditors around the continent are responsible for maintaining the Association's industry-leading quality certification program. That program today encompasses a growing number of member manufacturer facilities operating under certification procedures, such as the APA Quality Management System (QMS), designed to place greater emphasis on mill quality control programs as opposed to primary reliance on testing and inspection of the finished product.

This approach, which is based on key elements of International Standards Organization (ISO) 9001 and employed successfully in numerous other industries, provides clients greater flexibility in designing and conducting a quality assurance program tailored to their specific needs, including opportunities for incorporating proprietary quality initiatives. It offers the potential to lower the cost of the quality function itself and, most importantly, provides a more effective means to assure that the product in the marketplace performs to consumer expectations. QSD staff members also are trained and available to assist interested member mills in implementing QMS principles in their manufacturing operations.

QSD also maintains recognition of APA as a quality inspection and certification agency by accreditation bodies around the world – a key factor in APA's reputation as a leading global forest products industry quality certification and technical organization. These recognitions include:

- International Accreditation Service (IAS)
- Standards Council of Canada (SCC)
- HUD
- City of Los Angeles
- State of Florida
- Japan (under the Registered Overseas Certification Body)
- Dancert, for inspections for certification in Europe
- BM TRADA, for inspections for certification in Europe
- SAI Global, for inspections for Australia and New Zealand

The division each year typically conducts between 2,000 and 2,500 individual member mill audits to help assure compliance with domestic and international quality certification requirements.



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Long-term Partnerships

While the APA Research Center's capabilities are state of the art, APA over the years has sought to leverage its industry leadership by entering into strategic partnerships with numerous other industry organizations, educational institutions and government agencies with technical assets and/or expertise. These have included the USDA Forest Products Laboratory, FPInnovations in Canada, American Wood Council, WoodWorks, Washington State University, Clemson University, University of Florida, Southern Forest Products Association, Structural Insulated Panel Association, University of British Columbia, Canadian Wood Council, Natural Resources Canada, Coalition for Advanced Wood Structures, Composite Panel Association, and Institute for Business and Home Safety, among others.

APA technical (and quality services) staff also have a long and productive research relationship with members of the Engineered Wood Technology Association (EWTA), APA's related nonprofit industry supplier organization whose members include manufacturers and suppliers of processing machinery, chemicals and adhesives, materials handling equipment, measurement and labeling equipment, safety products, and consulting services, among others. Over the past 15 years, EWTA – whose headquarters are in the Research Center building – has contributed more than \$150,000 to APA research efforts, resulting in new standards, processes and products benefitting the industry.

As esoteric as the Research Center's activities may seem sometimes to the layman, Yeh is quick to point out that all activities must pass a simple test: they must be linked to carefully evaluated market needs and opportunities, and serve as a credible technical foundation for the Association's market support and development mandate.

Given the tremendous growth of engineered wood product demand over the last half century, the APA Research Center appears to be more than passing the test. 

Jack Merry is retired APA industry communications director. He can be reached at jfmerrycomm@gmail.com.

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ASSOCIATION FOCUS

Q&A with APA President Ed Elias

by Sheila Cain

At APA – The Engineered Wood Association’s Annual Meeting in San Antonio, Texas, in November, APA President Ed Elias spoke to the General Session attendees about the association’s recent activities and plans it has for the future. The *Engineered Wood Journal* recently caught up with Elias and asked him to share more about APA’s partnerships, market segment focuses and trade missions. Here’s what he had to say.

Engineered Wood Journal:

You mentioned that APA has been working with several associations — including EWTA — on a number of issues. Which associations have you been partnering with, and what’s emerging?

APA President Ed Elias:

Expanding strategic alliances are one pathway for the future success of this industry, but only if these partnerships support and leverage the goals of this association more effectively than alternative approaches. APA has sought to identify partners who provide complementary strengths, common underlying culture, strong commitment and offer financial stability. During 2015, several new initiatives are being implemented by APA in this regard.

For example, members of APA, the Engineered Wood Technology Association (EWTA), the American Wood Council (AWC) and the Composite Panel Association (CPA) share the common goal of reducing the risk for product challenges in the market place, often from regulatory constraints. These organizations have a much stronger collective voice when topics such as product labeling for formaldehyde and other VOCs are being debated at state and national levels. We are able to coordinate the messaging and testimony during public hearings and provide cost efficiencies when lobbying or supporting testing is



Photo courtesy of APA – The Engineered Wood Association

APA President Ed Elias, left, visited USDA Forest Products Laboratory Assistant Director Mike Ritter at EWTA’s Info Fair in San Antonio, Texas, last fall.

required. In 2015, EWTA, the USFS Forest Products Laboratory (FPL) and APA are collaborating on quantifying selected benchmark VOC emission levels from structural wood-based panels and engineered wood products, as manufactured in North America.

APA, AWC and the Canadian Wood Council (CWC) also share the common goal of providing complete building solutions and improving the engineered value of our members’ products versus the non-wood competition. Future expansion of the building codes in North America to recognize wood frame construction opportunities beyond four stories is one example. This goal includes not only coordination through the building code process but also the testing, development and promotion of new wood solutions like podium and mass timber options to designers, specifiers and builders. As an example, APA partners with WoodWorks, in both the U.S. and Canada, to deliver this message through their popular Wood Solutions Fairs.

Partnerships also provide the opportunity to offer new or expanded services. In 2015, APA will also be expanding our influence in the Canadian code and regulatory community through partici-

pation on the Technical Priorities and Strategy Committee of CWC. Additionally, through access of the technical and promotional staff of CWC in Ottawa, APA will expand services in the French Canadian language both in publications and response from our two respective help desks.

EWJ:

APA has been working hard this past year to develop and maintain markets. What market segments have been your focus, and what’s been accomplished?

Elias:

APA has an industry-wide Strategic Marketing Plan that is developed and prioritized annually through our member-directed advisory committee process. Strategic direction for market access and development as well as program metrics are provided in four major market areas: residential, nonresidential, industrial and international. The following highlights only a few of the accomplishments against these many trade goals.

Protection of the single-family home wall sheathing market share at 80 percent has been of focus of the association for several years now and continues to be

a high priority. On the defensive front, the Coalition for Fair Energy Codes (CFEC) was formed to address competitive threats emerging for changes to the national and state energy codes. CFEC, a partnership between APA, AWC, EWTA and the National Association of Home Builders, has been successful in influencing over a dozen key states to ensure that they do not discriminate against wood products and systems as they adopt and revise current energy codes. During 2015, key states such as Texas and New York are being targeted in this regard. On the offensive front, FPL and APA are also coordinating several research projects to analyze building envelope assemblies and develop recommendations for new designs that combine structural and energy efficiencies of wood-based wall assemblies for future promotion.

Several collaborative efforts on market education also exist for engineered wall and floor assemblies. In 2014, APA, the International Code Council (ICC), CWC and the Canadian Construction Materials Center (CCMC) reaffirmed through

testing at APA the engineering design capabilities and design configurations for structural wood I-joists in both the U.S. and Canadian codes. This information will be translated as revisions to AWC's ANSI Standard for Seismic and Wind Design and promoted through their code directed seminars. Additionally, APA and the ICC jointly published a wall bracing guide that will continue to be distributed through a series of seminars presented by both organizations.

Fire resistant floor assemblies built with structural wood I-joists and wood-based panels is another high profile market segment targeted by APA. Concern related to the fire performance of code-compliant wood assemblies is the threat addressed here. We have recently issued our new APA Systems Report 405, which provides five practical solutions that can be used by builders to comply with the requirements in the International Residential Code for single-family house construction. Our first webinar on this topic drew over 600 participants and SR-405 has been our most requested pub-

lication from the APA website, drawing more than 1,000 downloads during the first three months of its introduction. In 2015, we will be expanding our promotional program of literature, webinars and trade servicing with the goal of making it easier for designers, specifiers, builders and firefighters to understand the merits of these systems.

EWJ:

APA has spearheaded some trade missions into the international market. Explain the growth of these markets and the successes APA has realized.

Elias:

Trade missions are an important component of APA's strategic direction in our international program. They provide an opportunity for APA member companies to meet with the distribution trade and specifiers in targeted overseas markets. In 2014, 15 member companies participated in 51 events in 16 countries overseas. These missions are coordinated across

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the industry through partnerships with the Canada Wood Group, Softwood Export Council, Southern Pine Council and the American Hardwood Export Council.

In 2014, more than \$426 million of North American structural panel and engineered wood products were exported overseas; our second best year this decade. This performance is all the more remarkable when viewed in light of the weakening economies of many of our targeted export destinations: Japan,

Australia, Mexico, China and Russia. However, we are also seeing new opportunities in emerging markets of Korea, Central and South America and renewed interest in the Caribbean. Larger shares of OSB application are being reported in structural panel shear walls in Japan as a result of recent code expansion activities conducted by APA. The application of radiant barrier sheathing is also being realized outside of North America, and the expansion of wood product assemblies in elder care facilities is taking hold.

The latter capitalizes on the longer spans afforded by lightweight wood frame assemblies.


EWJ:

APA has always made it a priority to educate its members. How have changes to the APA website helped educate and guide new business to members?

Elias:

In October 2014, APA introduced our newly renovated website, www.apawood.org. Financial support for this renovation included assistance from the USDA Forest Service Forest Products Laboratory. A primary objective of this renovation has been to improve our ability to direct trade leads and inquiries for specific products directly to our appropriate members. The site receives over 1.9 million unique visits each year – over 5,200 each day! Every aspect of this website is directed at the continued education about and specification of APA trademarked material or redirecting the clients directly to our members' individual websites for product procurement. And referrals to APA member sites from only one section of this site, www.performancepanels.com, set a new record this year, growing by 56 percent.

A new feature on this website relates to technology transfer, and in particular projects prioritized and supported directly by contributions from the membership of EWTA. The information here provides supporting technical information and tools that allows our members and their customers to have confidence to design, specify and install APA trademarked product correctly and in compliance with referenced codes. The information in this section is not restricted to APA research but also includes supporting material from our research partners.

In closing, I look forward to working in partnership with the membership of EWTA, as we direct our combined energies towards the continued financial success of this industry. 

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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SUPPLIER SUPERSTARS

EWTA Supplier and Innovation Award Winners Honored



The winners of EWTA's Supplier Awards were announced at the Chairman's Dinner during APA's Annual Meeting in San Antonio in November.

Supplier of the Year awards are given to EWTA member companies and chosen by votes of APA members. The awards are based on quality, service and delivery of EWTA member products, equipment and services provided to APA members. Awards are presented in each of EWTA's three membership categories: Equipment/Tooling, Materials/Supplies, and Consulting/Services.

EWTA's 2014 **Supplier of the Year Award** winners are:

- Ventek – Equipment/Tooling category
- Hexion Inc. (formerly Momentive) – Materials/Supplies category
- (tie) Evergreen Engineering and Panel World Magazine – Consulting/Services category

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

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quality, or in some other way provide a bottom line benefit to APA members. APA members also vote for the winners of these awards.


The winner of the **Innovation of the Year Award** is:

- Akzo Nobel – “Forward Integration”

Forward Integration replaces old generic mixing charts and estimations used in the manufacturing of laminated beams, decking and CLT panels. It measures the board temperature, planned assembly time and estimated pressing time to calculate the mix ratio and/or spread rate for optimal production parameters.

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This year, EWTA brought increased visibility to the Supplier Awards program by offering APA members the option to vote for Innovation of the Year and Supplier of the Year candidates in person at Info Fair in San Antonio. APA members viewed candidate member presentation posters as they entered the Info Fair exhibition hall and cast their votes. APA members were also able to vote online for both Innovation of the Year and Supplier of the Year candidates, as in the past. This added voting opportunity allowed EWTA members an additional avenue to present their entries. 



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THE HISTORY OF HOMEOWNERSHIP

Tumultuous Market May be Giving Way to Stabilized Rates

by Joe Elling

The homeownership rate trend in the United States is a critical driver of the health of the North America wood products industry, as this influences the mix of starts between single-family homes and multifamily structures. While a number of events drove a sustained increase in homeownership from 1994 to 2004, the trend has since reversed.

During the recovery following the recession that began in 2007, homeownership has continued its decline from the peak of the housing bubble in the mid-2000s. This has frustrated the recovery in single-family starts, while multifamily construction is growing. While an increase in construction may seem favorable at first glance, an uptick in multifamily starts comes at a cost. The average square footage of a new single-family home is more than twice that of a multifamily unit, and the construction methods use more wood products.

Homeownership rates have hardly been fixed over the past several decades. Homeownership declined in the early 1980s, then leveled out and remained stable until about 1994 as shown in Figure 1. From 1994 until 2006 the homeownership rate rose consistently, with the number of homeowners – including owners of condominiums and mobile homes – increasing by about 13 million, or close to 1.1 million per year. The homeownership rate has been on a downward trend since the most recent recession began. The number of homeowners decreased by 1.2 million from 2006 to 2014, or roughly 150,000 per year.

The good news? It appears homeownership rates may finally start to stabilize.

Homeownership Through the Years

There are a number of forces that drive the decision to own some form of hous-

Figure 2

Homeownership Rates By Age of Householder (Percent)

	1990-94	2004-06	2014
Under 25	15.2	25.2	21.8
25-34	43.7	49.2	40.5
35-44	65.5	69.1	59.7
45-54	75.1	76.6	70.7
55-64	79.7	81.3	76.3
65 and older	77.1	80.9	79.9
Total	64.0	68.9	64.5

Source: Census Bureau

Homeownership rates are down across all groups from their peak between 2004 and 2006.

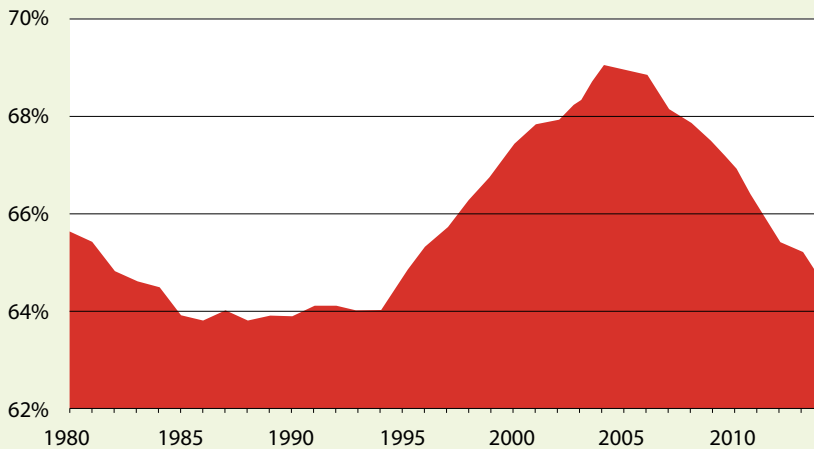
ing unit, and many have been in play over the past several decades leading up to our present day situation. For this discussion, they include the U.S. population age profile, economic wherewithal (employment and income), and lending standards/ease of access to mortgage credit.

The U.S. Census Bureau provides estimates of home ownership rates by age of householder and type of household. The home ownership rate increases with the age of the homeowner. It takes time for people to save enough to make a down payment and progress career-wise to attain an income high enough to qualify for a mortgage.

Homeownership rates across all age groups increased from the 1990-94 average through to the mid-2000s (see Figure 2), which drove the overall homeownership rate to near 69 percent. Even if the age group-specific homeownership rates had remained constant at the mid-1990s average, the overall homeownership rate would have increased to 65 percent in

Figure 1

U.S. Homeownership Rate



Source: Census Bureau

While a number of events drove a sustained increase in homeownership from 1994 to 2004, the trend has since reversed.

the mid-2000s period and would have been slightly greater than 66 percent in 2014. The support for making this statement is that the aging of Baby Boomers, those born in the years 1946 to 1964, has moved them into age groups where the homeownership rates exceed 75 percent.

Clearly, homeownership rates have not been constant for the last 20 years. From 1994 to 2006, the U.S. economy enjoyed a period of steady economic growth. There was the eight-month recession from March to November 2001, but it was relatively mild, and with the aggressive moves by the Federal Reserve to ease credit conditions, the housing industry remained relatively unscathed.

Critical to driving demand for new homes is the economic wherewithal among those under the age of 35 – the bulk of first-time buyers. Typically, first-time homebuyers purchase an existing home, allowing existing owners to use their equity gains as a down-payment to trade up into a new home. Following the recession in the early 1990s, consistent job growth combined with a greater percentage of women in the paid work force gave rise to healthy gains in the incomes of married couples. The median income of married couples in the 25-29 and 30-34 year-old age groups increased 28 percent and 20 percent respectively from 1994 to 2001. (See Figure 3.) This provided the economic means for a greater percentage of young people to buy a home.

Although the 2001 recession was relatively short, there were severe declines in employment among people in these age groups and the median incomes of married couples fell (see Figure 4). At the same time, house price inflation accelerated, so the ability to buy a home should have been severely impaired. Yet, homeownership rates continued to rise. It is here where the role of easier access to mortgage credit through the use of nontraditional mortgages – such as subprime; interest-only or no-document loans; zero down payments; or relaxation of lending standards – came into play and offset the impact of declines in real incomes.

The Latest Recession Hits

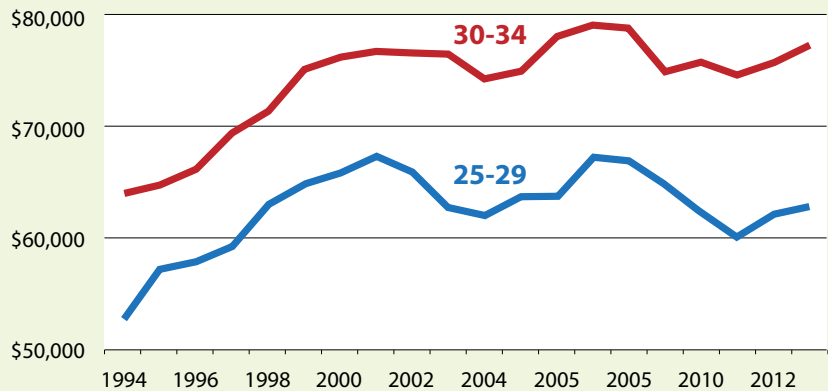
What was inducing lenders, borrowers and investors in mortgage-backed securities to engage in more risky behavior? It was the conviction that home prices only go up, backed by historical data (see Figure 5). At the time, house price gains accelerated from a rate of three to four percent in the decade between 1990 and 2000 to 12 percent on a national basis by 2005. That came to an abrupt halt as the

vacancy rate in the homeowner sector of the housing market surged due to increased supply. Single family starts hit 1.7 million units at the same time home sales began to decline. Then mortgage rates rose with the tightening of credit conditions by the Federal Reserve.

The housing industry was already in decline well before the official onset of the recession that started in December 2007. Delinquencies on mortgages were

Figure 3

Median Income, Married Couples By Age of Householder (2013 Dollars)

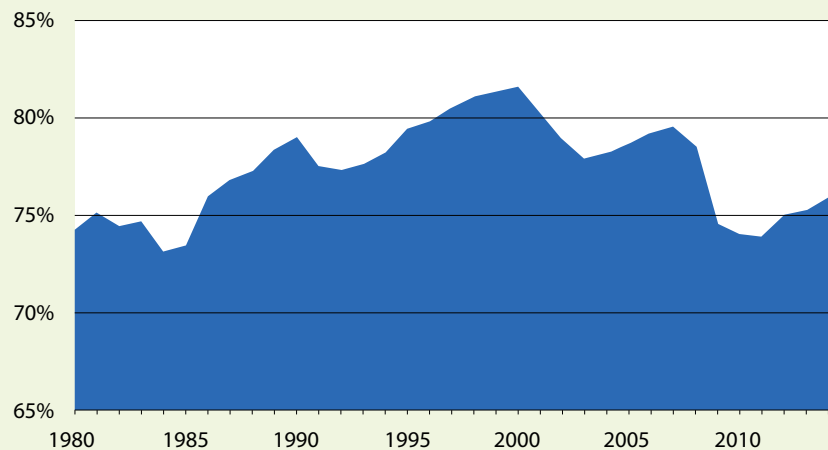


Source: Census Bureau

Although the 2001 recession was relatively short, there were severe declines in employment among people in these age groups and the median incomes of married couples fell.

Figure 4

Employment Rate, 25-34 Year-olds



Source: Bureau of Labor Statistics

The employment rate of 25- to 34-year-olds is showing improvement, but it could be 2020 before the employment rate is back to 2007 level.

already on the rise as many people who took out high-risk mortgages could not make the higher payments. With the onset of the recession, employment plunged, pushing millions of homeowners into foreclosure. Even some homeowners who could still make their payments chose to default because the collapse of home prices put them underwater on their mortgage. This was especially true in the extreme bubble markets of Phoenix, Las Vegas and southern California.

Employment did not start to improve until 2010 and the gains were not great enough to meet the growth in the working age population. The percentage of employed people ages 25-34 years did not bottom until 2011 and has risen steadily since, but the average for 2014 was still near a historic low.

The economic challenges faced by much of the population, especially young adults, have severely compromised their ability to own a home. This challenge has been made more difficult by the tightening of mortgage credit availability. In a research report by Wei Lu and Laurie Goodman of the Urban Institute, a measure of mortgage credit availability that accounts for expected default risk based

on the characteristics of the borrower and the structure of the loan is developed. Based on this index, it is their conclusion that mortgage credit availability has consistently been more constrained since 2008 than in the years prior to the onset of the housing bubble.

Looking Forward

Clearly, a number of factors have come together since 2006 that have caused the homeownership rate across all age groups to fall on a sustained basis, despite the rate on a 30-year fixed rate mortgage running consistently below 4.5 percent since mid-2011. While growth may be on the way, it may be slower than many would like.

Projections of the age profile of the population through 2020 suggest the homeownership rate in total should increase by almost one percentage point. However, there are several forces that could act as headwinds that prevent this from happening.


First, there is an unprecedented number of people under age 35 who are still living at home and could be moving out on their own in the next two or three years. While this will be a good turn of events as it will increase the demand for

new housing, it may be satisfied by rental apartments; not single-family homes.

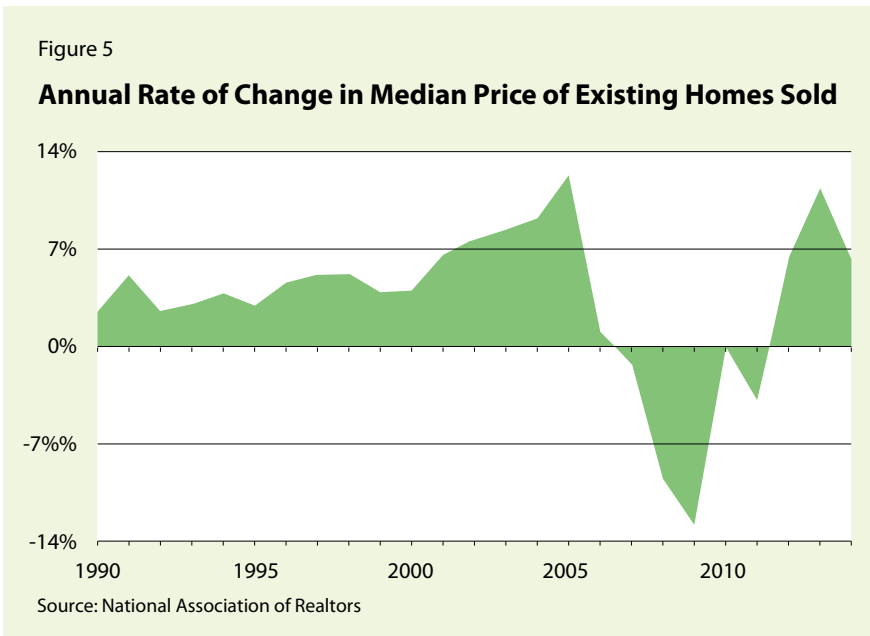
Second, it is not clear how long mortgage rates will stay at historically low levels. A return of mortgage rates to five or six percent can easily offset annual wage gains of two to three percent, from an affordability standpoint.

Third, efforts are being made by policymakers to support the housing industry by improving access to mortgage credit. But, it is still not clear how effective they will be since mortgage originators and lenders are going to be required to bear more of the loss in the event of a default.

Balancing the relatively favorable demographics and improved consumer confidence driven by more favorable job market conditions against some of these headwinds, it appears the U.S. could be entering a period where the overall homeownership rate stabilizes near the 2014 level. With household growth likely to return to trend of roughly 1.1 to 1.2 million per year or slightly higher, just stabilizing the homeownership rate means homeowner household growth of 700,000 to 800,000 per year through 2020. This would be a major improvement from the experience of the last eight years, when Census Bureau data suggest the number of homeowners declined by an average of approximately 150,000 per year.

Absent any major disruption, housing starts in the U.S. are projected to return to the 1.5 million level in 2018 and 2019, with single-family starts near 1 million units in those years. For producers of engineered wood products, this points to demand by the end of the decade of 30 to 40 percent greater than the levels experienced in 2014. 

Joe Elling is the director of market research at APA. He can be reached at joe.elling@apawood.org



The decline in prices from 2007 to 2011 is still impacting perception of financial return of buying a home.

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STAYING THE COURSE

Business Outlook Survey Suggests Continued Optimism

by Sheila Cain

The slowly improving economy seems to be reflected in the outlook of Engineered Wood Technology Association members. According to the results gathered by EWTA's annual Business Outlook Survey, business didn't improve as much this past year as members had expected, but most feel the future looks fairly bright.

The 2014 Business Outlook Survey shows 69 percent of respondents saw their company's wood-related business improve in 2014. While this number is less than the 85 percent of respondents who last year felt their 2013 business improved over the previous year, no members indicated that their business had gotten any worse. Eight percent said their wood-related business stayed the same in 2014 as it had been in 2013.

Members are still remaining hopeful. Seventy-three percent – the same number as last year – said they felt that business will improve this year over last year. Only four percent felt things would get worse, and 23 percent felt it would stay the same.

Member companies' wood-related employment levels didn't increase as much in 2014 as they had in 2013 (42 percent in 2014, compared to 56 percent in 2013), but the survey indicates that 42 percent of members expect employment levels to increase in the coming year; a bit higher than the 39 percent who felt the same way in the previous year's survey.

Our members' tempered optimism seems to match the pace of the recovery in the housing market. In this month's *Journal* feature, "The History of Home Ownership," APA – The Engineered Wood Association Director of Market Research Joe Elling describes how homeownership rates have fallen on a sustained basis since 2006, and while markets are expected to stabilize and improve, the recovery has been slower than the industry would like.

2013-2014 Survey Response Comparisons

	December 2013 Survey	December 2014 Survey
Did your company's wood-related business over the past year:		
Improve	85%	69%
Worsen	0%	0%
Stay the Same	15%	31%
Did your company's wood-related business employment level over the past year :		
Increase	56%	42%
Decrease	7%	4%
Stay the Same	37%	54%
Do you expect your company's wood-related business in the coming year to:		
Improve	73%	73%
Worsen	2%	4%
Stay the Same	24%	23%
Do you expect your company's wood-related employment level in the coming year to:		
Increase	39%	42%
Decrease	2%	8%
Stay the Same	59%	50%
How optimistic are you about your wood related business in the coming year versus last year?		
More Optimistic	71%	62%
Less Optimistic	5%	15%
Same	24%	23%

The web-based survey was sent to all EWTA members last year. It posed five questions relating to wood-product businesses' employment levels and overall

business health. Fifty percent of respondents were in the equipment/tooling category, 42 percent were in the materials/supplies category and eight percent were

How important are the following for recovery:

	Very Important	Important	Unimportant
State of the U.S. housing market	85%	15%	0%
Government regulation	19%	58%	23%
Government economic policy	46%	46%	8%
Marketplace competition	42%	39%	19%
Raw material prices or supply	39%	46%	15%
Transportation costs	23%	54%	23%
International exchange rates/trade policies	30%	35%	35%
Labor issues	19%	27%	54%
Economic uncertainty	35%	54%	11%

in the services/consulting category. Sixty-five percent of the survey respondents were from the U.S., 12 percent were from Canada and 23 percent were headquartered offshore.

Fairly Optimistic

Overall optimism about member companies' business opportunities in the coming year is fairly healthy. Sixty-two percent said they felt more optimism about the future than they did the previous year.


Survey takers were also asked to rank several factors as "very important," "important" or "unimportant" for industry recovery. Every respondent indicated that the state of the U.S. housing market was important, with 85 percent indicating that they felt it was "very important" and 15 percent finding it "important." Responding members also felt that Government Economic Policy was important, with 46 percent finding it "very important" and an equal number indicating it is "important." Only eight percent felt it was unimportant. Members continue to be concerned about Economic Uncertainty. Eighty-nine percent felt it was either a "very important" or "important" piece of the economic recovery puzzle.

It's clear EWTA members are doing what it takes to remain successful in today's challenging market. In a section of the survey in which respondents were

asked to list what they have done to adapt to economic conditions or exploit opportunities, members have said they have added key people to address future business opportunities, diversified into other geographic markets, increased marketing efforts, and optimized processes or machinery.

"We have added key people to be able to handle new business opportunities we see in 2015," said one member.

"We have tried to increase our efficiencies through increased automation and right-sizing our labor force," said another.

Looks like EWTA members are on the right track. 

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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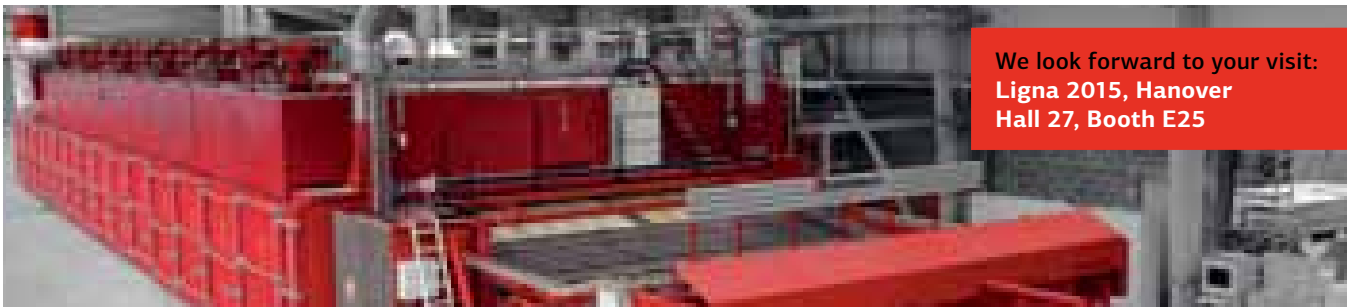
Metriguard President Jim Logan was honored to receive the Bronson J. Lewis Award and says thanks to APA - The Engineered Wood Association for the recognition. Metriguard is proud to be members of APA and the Engineered Wood Technology Association. Jim also wants to thank the engineered wood products industry for supporting Metriguard over the last 4 decades.

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2015 Membership Directory

The Engineered Wood Technology Association (EWTA), the related nonprofit supplier organization of APA - The Engineered Wood Association, serves as a networking and information transfer vehicle between North America's engineered wood product manufacturers and their product, equipment and service providers.

This membership directory, updated for 2015, 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.
- Discounts on APA events and *Engineered Wood Journal* advertising.
- Free company listing and profile in the annual meeting issue of the *Engineered Wood Journal* for EWTA Info Fair exhibitors.
- Member products and services directory.
- Annual meeting and other event sponsorship opportunities.
- Supplier award program participation.
- Opportunities to exchange information with other EWTA members, APA members and APA staff via an EWTA advisory and subcommittee structure.
- Opportunities to support, participate in and receive the results of important industry technical and market research projects.

The annual cost of EWTA membership is just \$1,200. For more information about the benefits of membership or for a membership application, contact Terry Kerwood, Managing Director, terryk@engineeredwood.org or 253-620-7237, or visit the EWTA website at www.engineeredwood.org.

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Phone: 506-216-9251
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AkzoNobel Wood Adhesives

AkzoNobel Wood Adhesives is one of the leading global producers of adhesive systems for the woodworking industry. Our goal is to significantly improve our customers' productivity, environmental impact and production process by partnering with the industry and focusing on advanced research and development.

Contact: Brian Tolley - Application Manager,
Structural Adhesives
Phone: 336-841-5111
PO Box 2103
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brian.tolley@akzonobel.com
www.akzonobel.com/casoadhesives



Albany International

Albany International is a global advanced textiles and materials processing company founded in 1895. We are headquartered in Rochester, New Hampshire and employ approximately 5,000 people worldwide. Our 26 manufacturing operations are strategically located in 13 countries to serve our global customers. Albany International's core business is production of custom-designed engineered fabrics and process belts, used to manufacture all grades of paper from lightweight technical paper to heavyweight container board. In its family of emerging businesses, Albany applies paper machine clothing technologies to develop unique materials and structures for a variety of other industries, including engineered wood products.

Contact: Tom Israel - Global Product Manager
Phone: 920-521-4618
3601 Electric City Blvd.
Kaukauna, WI 54130
tom.israel@albint.com
www.albint.com



ALTEC Integrated Solutions, Ltd.

ALTEC Integrated Solutions are industry leaders in scanning, optimization, control systems and quality control, with particular expertise in Veneer Lathe Peeling Lines and plywood manufacturing. In addition to the controls we also supply hardware such as Chargers (electric and hydraulic), Core Drives, Stackers and we are the industry leaders in applying electric linear actuators. Our customers use our technology and our services to improve their recovery, product quality, and their bottom line.
 Contact: Chris Bartlett - Vice President
 Phone: 604-529-1991
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 Contact: Janne Lahteenmaki - Fiber Technologies Sales and Technology Manager, Wood Processing
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Arclin - Performance Applied

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 Springfield, OR 97477
 blair.wilding@arclin.com
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Argos Solutions AS

Argos is a technology company utilizing innovative machine vision technology to automate manual visual inspection and manual repair work of wood products. We provide the latest technology of vision-based scanning systems for a wide range of wood panels and other building and furniture products. Argos, established in 1992, is a leading and preferred supplier of grading systems after sanding machines with installations in more than 30 countries worldwide. Argos latest development includes a fully automatic panel repair line for patching plywood panels. Argos was the first company worldwide to install a high-speed panel repair line and offers fully automatic solutions for soft and hardwood plywood. Our technology and knowledge will help wood-based companies to automate and reduce labor in the finishing area.
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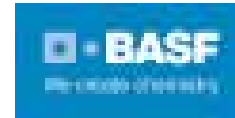
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 Contact: Mark Vlasisavich - Account Manager, Structural Assembly Adhesives
 Phone: 708-205-1586
 5200 Blazer Parkway
 Dublin, OH 43017
 mvlasisavich@ashland.com
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B&W MEGTEC

MEGTEC Systems, Inc., now Babcock & Wilcox MEGTEC (B&W MEGTEC) offers environmental equipment solutions that range from VOC abatement and energy recovery systems to particulate and acid gas control. B&W supplies packaged clean air solutions that are proven to meet stringent emissions regulations: wet scrubbers for high efficiency particulate removal for dryers and press vents; WESPS for gas cleaning, and ultra-high efficiency RTO/RCO systems for VOC abatement. MEGTEC also provides upgrades, parts and services for every make of APC equipment for the engineered wood industry.
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Baumer Inspection is the market leader for automated vision inspection systems in the wood based panel industry located in Konstanz, Germany. Our panel repair and grading systems ColourBrain® Plywood are efficient, fast and durable to give you the best performance possible.
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 Phone: 412-777-4105
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 tim.thiel@bayer.com
 www.bayer.com

Biele

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Phone: +34 943 15 70 50
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p.gavin@biele.com
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Contact: Stuart Clarke - President
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Coil Manufacturing, Ltd.

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Contact: Natasha Kletter - Manager
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Aloha, OR 97006
columbiariverstaple@gmail.com



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Contact: Cliff Lane - President & General Manager
Phone: 604-882-1602
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Panel Industry
Phone: 336-434-6644
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eric.johnston@costasanders.com
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Phone: 678-325-5813

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rick.burns@dieffenbacher.com

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Contact: Richard Wright

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Contact: Aaron Edwards - Director, Industrial Business Development

Phone: 541-484-4771

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Contact: Ed Pridgen - Minifog Product Manager

Phone: 336-299-2933

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Contact: Adrian Yovanovich - Managing Director

Phone: 3210-712-7803

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Phone: 253-383-2584

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don.macharg@grenzsbach.com
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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.

Contact: Greg Pecharsky - Vice President
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155-55202 SH 825
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Phone: 604-880-2361
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chris.whelan@ca.henkel.com
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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. Contact: Dale Leeper - PF Technology Manger
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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. Contact: Jason McIntosh - Business Development Manager
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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. Contact: John Bebak - Commercial Manager
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The Woodlands, TX 77381
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www.huntsman.com



IBC, International Bar Coding Systems & Consulting Inc.

An integrated manufacturer of the fastest individual piece WOOD PRODUCT specific printer applicator worldwide. For finished or in process units 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 our specialized Vendor Managed Inventory of consumables. We supply fully integrated data collection systems across North America. Manufacturing or distribution operations in BC, WA and TN. 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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Smart air innovations.™

IES - Integrated Environmental Solutions

IES is a progressive air-engineering firm that eliminates the problems with combustible dust through its line of SonicAire® fans. All the fans apply the new, innovative BarrierAire™ technology system, which delivers enterprise-wide continuous clean through robotic engineering design. All fans clean by using high velocity and high mass airflow to create an overhead barrier preventing combustible particles from accumulating on steel structures, pipes, ducts and process equipment. Our engineers have customized different fans for every industry since fugitive particles vary by the materials processed. Take advantage of our Try and Buy Promotion.

Contact: Jordan Newton at 336-712-2437.
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www.iesclean.com



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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IMEAS Inc.

IMEAS is a world leader in surface finishing solutions, with over 2,400 machines operating worldwide. IMEAS sanding and grinding machines are used to achieve precise surface finish and thickness on a wide variety of products such as plywood, LVL, composite wood panels, decorative laminates, flooring and solid surface products, etc. IMEAS specializes in extra wide machines – 10' (3.2 meter) and cross-belt sanding for wood products and non-directional mirror finish for specialty steel products.

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InterWrap

InterWrap® is the largest supplier of coated woven wrap to the Engineered Wood Industry. It's 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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Itipack Systems

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

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www.itipacksystems.com



JAX, Inc.

JAX is a full-line lubricant manufacturer with expertise in compounding high-end synthetic and petroleum lubricants. With over 55 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 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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msimmons@kimwood.com
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KTC Panelboard Engineering

Complete engineering services for the engineered wood products industry.

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LIMAB

LIMAB supplies non-contact laser measuring systems for composite panels and engineered wood products.

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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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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 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 includes antistick coatings, rubber lubricants, anti-seize compounds, cleaners and protective coatings. Through six decades of innovation, we've earned an international reputation for performance and world-wide industry recognition as expert problem solvers. Specialists in assessing complex processes, unusual conditions and developing working solutions.

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M-E-C Company

Founded in 1961, M-E-C's principal business is the design, manufacture, installation and service of industrial dryer systems, combustion systems, storage bins and pneumatic and mechanical conveying systems for the many different industries served, including the engineered wood products industries - particleboard, oriented strandboard, medium density fiberboard and pellet manufacturers. M-E-C's in-house engineers and technical professionals have installed and serviced more than 580 dryer systems worldwide. Our expertise includes single-pass, triple-pass and flash tube dryer systems.

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www.m-e-c.com



Metriguard, 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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Michelman

Michelman is a leading global developer of release agents for engineered wood panels and water repellent technologies for wood products. We also manufacture and market water-based barrier and functional coatings for flexible film packaging, paperboard and corrugated cartons; and water-based surface modifiers, additives and polymers for numerous industries including wood and floor care, industrial coatings, inks, fibers, composites and construction products. Michelman serves it's multinational and regional customers with production facilities in the U.S., Europe and Singapore, and a worldwide network of highly trained field technical support personnel.

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Mill Machinery LLC

Mill Machinery is a provider of new and used machinery to the veneer and panel industries. Mill Machinery's inventory of used production machinery includes veneer lathes, 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 systems, press platens, hydraulic units, panel feeders, stackers and conveyors.

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www.millmachinery.net



NESTEC, Inc.

NESTEC, Inc. is a turnkey provider of thermal oxidation systems for the wood products industry including regenerative and regenerative catalytic technologies, process duct design, system upgrades, energy audits, inspections and parts. Our staff of engineers has over 30 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 system, NESTEC, Inc. is your best resource to ensure a successful project.

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www.nestecinc.com

Nicholson Manufacturing Ltd.

Industry Leader in ring debarking technology since 1948.

Contacts: James Bowden, P.Eng. - NCVS Manager
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www.debarking.com



Hurricane, WV

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 (formerly DSM Melamine) is a melamine crystal supplier for use in resins with formaldehyde that are used for (among others) OSB, plywood, and other panels.

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Pacific Fluid Systems Division of HAWE Hydraulics

HAWE Hydraulics is a well-respected, family owned, German company that recently acquired Pacific Fluid Systems, LLC. HAWE's primary business is providing high quality hydraulic components. Through the acquisition of PFS they have increased their offerings to become a Solution provider in hydraulic systems and linear motion applications. Engineering and design focus to provide low cost, energy efficient solutions and enhanced documentation for machine positioning and controls. PFS offers a full range of products from custom hydraulic manifolds to complete hydraulic press conversions. PFS / HAWE also provide complete linear Hydraulic and Electro-mechanical motion control systems.

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www.hawehydraulics.com

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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www.pallmann.eu

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. Call or E-mail for more information.

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www.panelmachinerycontrols.com

Panel World Magazine / Hatton-Brown Publishers, Inc.

Panel World's international readership receives six issues per year with emphasis on mill project startup articles. Product coverage includes softwood and hardwood plywood and veneer, oriented strand board, medium density fiberboard, particleboard and other composite boards and engineered wood products. Hatton-Brown publishes magazines for the Forest Products Industry, of which Panel World is one.

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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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Paslode

Leading designer and manufacturer of cordless and pneumatic nailers, staplers and specially engineered fasteners designed to deliver superior wood fastening solutions to the residential construction industry; applications include framing, sheathing, roofing, siding and finishing applications.

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www.paslode.com



Permapost

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

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www.permapost.com

Pöyry Management Consulting

Whether you are developing a strategy, planning an acquisition, considering an investment project or improving your performance, Pöyry can help. We aim to improve your business prospects by applying the right mix of experience and outside-the-box thinking. We take an impartial stand based on a clear analytical framework and a solid working process. Through accessing our network of global offices, our experts are able to tap into long experience in collective forest industry knowledge. We provide consulting and advisory services at the strategic and operational level. Our clients benefit from our pragmatic implementation plans and solid execution.

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Process Combustion Corporation

Incorporated in 1969 and based in Pittsburgh, Pennsylvania, USA, Process Combustion Corporation (PCC) designs, supplies and services combustion, heat transfer and pollution control systems. PCC provides solutions to the industry's air pollution control needs via Thermal Oxidation and Bio-Oxidation System Technologies. Our 45+ year commitment to industry ensures customer satisfaction. • Our principal industries and applications include: Chemical, Petrochemical and Petroleum; Automotive; Sulfur Recovery; Resins; Plastics; Chlorinated Hydrocarbons; Rubber; Carbon; Pharmaceutical; Pulp & Paper; Building Products; Fertilizers and Pesticides. • PCC is a global company with additional office locations in Beijing, China and Aylesbury, England.

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www.pcc-sterling.com



Raute

Raute is Your Partner in Performance – With global expertise in wood products technology and innovation driven, Raute continually leads the market in developing cutting-edge advancements in the production of veneer, plywood and LVL. 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

REA JET offers technology with excellent flexibility & variable implementation for the day-to-day needs of a demanding production environment. REA JET's product range includes large character ink jet printers (DOD), high resolution ink jet printers (HP print technology and piezo), small character ink jet printers (CIJ), laser systems, spray mark systems and labeling systems.

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Samuel Strapping Systems

With over 50-years serving the lumber and forest products industry, Samuel Strapping Systems, 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, stretch-wrap, 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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SASCO Chemical Group Inc.

Researcher and manufacturer of release agents for the engineered wood industry.

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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 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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Spar-Tek Industries, Inc.

Spar-Tek 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. Spar-Tek'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 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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www.spar-tek.com



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 wax, resin, moisture and chemicals to chips, mats, cauls or belts. These systems ensure the precise volume of fluid is applied even when operating conditions like chip tonnage or line speed changes. We also offer the industry's largest selection of spray products for use throughout your mill in other operations such as humidifying, marking, cleaning and coating. We serve our customers around the world from our 12 manufacturing facilities and 90 sales offices.

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www.spray.com

Standex Engraving Group

Standex Engraving manufactures engraved steel press plates, embossing machinery and engraved molds. Their staff of designers and engineers specializes in the creation of customized, life like, user-friendly textures for a variety of wood based products.

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www.standexengraving.com

Steinemann Technology USA, Inc.

Steinemann Technology offers comprehensive sanding solutions with machines, sanding paper, 24 hour technical expertise and support and 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 manufacturers scrap choppers, veneer saws, hoists, turners and full veneer dryer infeed and outfeed systems. Sweed also specializes in all replacement parts for Raimann and other plywood patchers and manufacturers, sharpens and repairs patcher dies. Based in Oregon, USA, Sweed offers unmatched quality, customer service, and technical support.

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sweed@sweed.com
www.sweed.com/panel/

TIP - The Industry Pivot Ltd.

TIP - The Industry Pivot Ltd. Offers wax suspension systems to engineered wood manufactures. Wax suspension systems allow better wax distribution and therefore significant wax reduction and better board quality over both slack wax and emulsified wax. TIP's suspension systems are manufactured by Coil Manufacturing Ltd., based in BC, Canada.

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www.the-industry-pivot.com



TSI

TSI designs and manufactures complete panel finishing lines for OSB, particleboard and MDF. This includes saws with such features as automatic position change and adjustable blade exposure. High-speed sorting and stacking of panels is easily achievable with TSI's "primary stacker" solution. TSI also supplies Heat Energy and Drying and Pollution Control Systems for OSB and Particleboard based on Single Pass Recycle technology. The Dryers are proven to increase productivity and reduce emissions compared to other systems. Heat Energy includes Step Grate Furnaces in conjunction with Sigma Thermal and Pollution Control solutions include Wet ESP and RTO systems developed by TSI to work at optimum efficiency with TSI Dryers.

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University of Tennessee, Center for Renewable Carbon

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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US Borax Inc.

Manufacturer of borate based wood preservatives and flame retardants.

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USNR

USNR manufactures complete plywood machinery lines including Coe brand lathes, computerized chargers, core drives, tray systems, dryers, stacking systems, lay-up lines and presses. USNR also supplies machinery for beam lamination, finger-jointing and presses for the composite board industry. We are committed to providing superior customer service and support throughout the operational life of your equipment.

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Valspar Corporation

With a wide range of products and technologies, Valspar is the leader in the Wood Coatings Industry for the Building Products market.

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Venango Machine Company, Inc.

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TWICE AS NICE

Associations Partner to Present Upcoming Conference

by Sheila Cain

The Forest Products Society and the Southern Forest Products Association are partnering this June to offer a conference that promises to bring together the latest in wood product technology and innovation.

The two wood product associations and their members will gather at Atlanta's Georgia World Congress Center June 10-12 for FPS's 69th International Convention and SFPA's biennial Forest Products Machinery and Equipment EXPO. While each association's program is tailored to the interests of its members, there will be a fair amount of crossover presentations and activities of interest to attendees across the board.

The partnership "gives us the opportunity to bring together all areas of the industry for a truly collaborative event that reaches across market segments," said Craig McKinney, FPS director. "There are so many events now for people to choose from, the more that we can collaborate and bring additional value to attendees the better."

The theme of this year's SFPA's EXPO is "Your Show. Your Business. Your Success," and the event promises many of the biggest names in the forest products industry, displaying everything from sawmill machinery to materials handling equipment. The show attracts key representatives from the nation's largest wood products manufacturers.

"EXPO 2015 is already 35 percent larger than the show two years ago," said SFPA's exposition director Eric Gee.

FPS's simultaneous event brings together hundreds of scientists, design professionals, managers, decision makers, and others from academia, government, nonprofit, and private industry sectors to discuss the state of forest products research and learn about innovations in the field. FPS's conference theme this year is "Unlocking the Potential of Forest Products," featuring sessions targeting wood properties in construction; wood and the



environment; education and marketing for the forest products industry; and advances in technology.

Crossover Program

Both FPS and the SFPA have joined forces to feature an educational program component to the conference called "INNOtech." Short for Innovations and Technology, the INNOtech program will feature a slate of technical seminars specifically geared to manufacturers of wood products and secondary processors. These seminars will be offered alongside the scientific and technical sessions traditionally offered during FPS's convention. The cost of the program is included in FPS members' registration. Those attending EXPO 2015 can pay \$149 in advance or \$169 onsite to attend INNOtech.

The INNOtech program is divided into three sessions: Safety and Dust Control; Mill Upgrades and Project Planning; and Operational Excellence.

"SFPA members actively provided input on the topics they wanted to see presented at INNOtech," said Gee. "During each session, attendees will hear from

top industry experts on these topics, with opportunities for some Q&A."


Among the speakers featured in the program are:

- **Jennie-Fe Engbert**, Senior Safety Consultant with Caterpillar Inc., presenting on "Driving Sustainable Culture Change through Accountability"
- **Brad Carr**, President of Integrated Environmental Solutions Inc. (IES), presenting "OSHA Inspections and Combustible Wood Dust: How to Secure Compliance"
- **Federico Giudiceandrea**, CEO of Microtec, discussing "Revolutionary Grade Optimization in the Bucking and Sawing Process"
- **Larry Poudrier**, Capital Sales Manager with Comact USA presenting "Profiling Sideboards at Primary and Secondary Breakdown"

The program's Operational Excellence session will feature a presentation by Robert Landau, director/senior principal of Pöyry Management Consulting called "Taking the Mystery out of Maintenance."

The FPS/SFPA event is expected to appeal to a wide range of wood industry interests and offer more than either conference could standing alone.

"Attendees will get a full day of practical industry knowledge combined with a full technical program related to research and science," said McKinney, "and at any time they have the ability to go and walk the expo floor to experience all the latest new products and technologies for the wood processing industry."

FPS members can register for the joint conference at www.forestprod.org/ic. Those wanting to see EXPO 2015 can register at www.sfpaexpo.com/register 

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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IMPLEMENTING A SAFETY CULTURE

Does Your Safety Strategy Contribute to or Constrict Business Strategy?

by Shawn M. Galloway

Safety will never become a core value within a company culture until the safety strategy is aligned with and supports the business strategy, rather than hindering or constricting it. Every organization has a “safety culture,” but could it be better? Yes, always, but not by doing more in safety. Instead, it is achieved by continuously doing things better and capturing and delivering real value. How efficient and value-focused are your safety efforts?

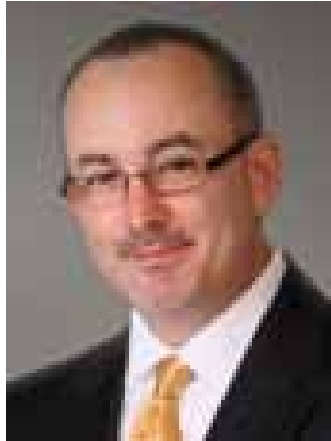
What’s your strategy?

We succeed in business by winning in the marketplace, not by failing fewer customers. If only we would take the same approach with safety improvement efforts. In order for businesses to compete and capture market share, they must add value to current and prospective customers. This requires a strategy, which is a framework of choices and tradeoffs an organization makes to determine how to capture and deliver value to the customers. Strategy, therefore, is how we will win with confidence.

Zero injuries or incidents is not the goal or vision of excellence and does not indicate you have won. Rather, it is a byproduct of the value of excellence. When we focus on delivering value, zero is an outcome, not a target nor an effective vision. Are we focusing safety efforts to win and add value, or to fail less? If we achieve zero injuries, how will we confidently know how it was achieved so we can duplicate results and yet still improve?

“Return on Attention”

When an organization conceptualizes a new product or service, a business hypothesis is formed to determine how, where, when and with whom we will



win. Data is subsequently gathered to prove or disprove the hypothesis; validate interest and forecast outcomes; prioritize objectives and the initiatives that support them; and measure to validate whether effort is indeed contributing to the desired results.

Safety should be managed no differently than businesses competing to win. Attention share is the market space that safety efforts operate within. Are we capturing attention, engaging, and creating interest? If we capture attention, what is the Return on Attention? Or, are we leading with disconnected activities, rules, and more and more energy, potentially disengaging those we wish to serve and help?

Through my work with the best in safety, I’ve aided leaders in realizing the need to evolve the role safety plays within business strategy. Below, are accounts of two clients who recognized this recently as both were executing on acquisitions.

Case Studies

With Client A, safety was an afterthought during the due diligence process, and their safety strategy wasn’t as aggressive as their business growth strategy. As a

result, the safety professionals were essentially mopping up behind the financial decisions. Misalignment and uncertainty (safety focus, accountability, systems, practices and priorities/values) contributed to significant issues, not to mention serving as real contributing factors to several incidents and injuries.

Waste became the undertone of safety efforts, and activities that served little purpose were commonplace. Through an engagement with senior leadership, a comprehensive safety excellence framework was understood, created and executed. Priorities were developed that, with data, confirmed where attention needed to be placed to both focus injury-prevention efforts and to align the culture. Culture change takes time and can be much longer due to initial disconnection between safety and business strategy. Since the engagement date two years ago, significant progress has been made.

In contrast, Client B’s safety strategy was included in and supported the business strategy. Tradeoffs were made on a regular basis as it was known that safety couldn’t do everything, and sometimes, less is more with safety efforts. Moreover, safety played a role in their due diligence efforts. While most mergers and acquisitions will come down to financial decisions, the culture and safety systems were very well understood, making assimilation a relatively smooth process.

“Want to” versus “Have to”


A culture of safety excellence will only be achieved when the strategies of business and the ideal core values around safety are one and the same. This does not occur with more platitudes, posters, and postulation or prescribed programs; it requires the hard work of deciding what to do and not to do to measurably



Image courtesy of ProAct Safety Inc.

Employers should ensure they are using value-focused safety activities when attempting to engage employees about safety. If employees aren't interested, the engagement exercises are a waste of time and energy.

improve performance, culture, and the value captured from the efforts. All organizations on the journey to continuous improvement in safety will reach a point where “more” is not the answer. Focus on efficiency and contributing and delivering value. It shouldn't be surprising that zero is much easier to obtain when ev-

eryone is on the same page regarding the joint strategies, and “want to” rather than “have to” is the predominant mentality throughout the culture. 

Shawn Galloway is the coauthor of the book, STEPS to Safety Culture Excellence, a keynote speaker, and president

of ProAct Safety. He was the guest speaker at the 2014 APA Annual Meeting in San Antonio, Texas, and has offered to make his presentation (Stop Trying to Create a Safety Culture, Evolve the One You Have) available. He can be reached at info@proactsafety.com.



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EWTA Welcomes New, Returning Members

Several companies serving or supplying the engineered wood products industry have joined or returned as EWTA members since the fall issue of the *Engineered Wood Journal*, bringing the current membership count to 102 companies. They are:

- **COSTA Sanders** of Archdale, N.C., a U.S. supplier of industrial sanding machines for processing wood, metal and other surfaces. Eric Johnson can be reached at

eric.johnston@costasanders.com

- **Eastman Chemical Company** of Kingsport, Tenn., a global specialty chemical company that produces a broad range of products found in items people use every day. Richard Wright can be reached at rwright@eastman.com
- **Panel Machinery & Controls** of Milwaukie, Ore., a provider of equipment design, servo motion control and automation systems for the engineered

wood products industry. President Roger Daniels can be reached at roger@panelmachinerycontrols.com

- **LIMAB** of Charlotte, N.C., a returning member, a supplier of non-contact laser measuring systems for composite panels and engineered wood products. Jens Svensson can be reached at jens.svensson@limab.com
- **Fusoni Componentes SL**, based in Mexico City with U.S. operations in San

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Antonio, Texas, developer and manufacturer of release agents and chemical additives for panel board (OSB, MDE, HDF, PB) manufacturing. North American Manager Adrian Yovanovich can be reached at ayovanovich@fusoni.us

- **SASCO Chemical** of Albany, Ga., a researcher and manufacturer of release agents for the engineered wood industry. Director of Sales Ed Juline can be reached at ejuline@sascochemical.com

New Leadership, New Member For EWTA Advisory Committee

Mary Jo Nyblad, immediate past APA Chairman and commodity sales and marketing director at Boise Cascade, was elected the chairman of the EWTA Advisory Committee at the group's fall meeting in San Antonio. Nyblad has been involved in APA leadership roles for many years: she served as chairman of the APA Marketing Advisory Committee, is a member of the APA Board of Trustees, and has served as both vice chairman and chairman of APA. Nyblad takes the reigns from John Murphy, president of Eugene, Ore.-based Murphy Company. Murphy served as Advisory Committee Chairman for five years, and also serves on the APA Board of Trustees.

Mark Vlasisavich, account manager with Ashland Performance Materials, was elected to the Advisory Committee, replacing Paul Pfeifer, who retired.

EWTA Approves Funding For APA Projects, Research

EWTA's Advisory Committee at its fall meeting approved a recommendation from the Adhesives and Technical Subcommittee to allocate \$56,000 in funding for four projects benefiting the engineered wood industry. The project proposals, presented by APA staff, included \$16,000 to support an advanced framing demonstration house project in the Chicago area; \$10,000 to fund hygro-thermal research at the test facility built on the APA campus in Tacoma, Wash; \$20,000 for a study of potential off-gassing of VOCs by various engineered wood products; and funding of \$10,000 for expansion of APA industrial market research.



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Info Fair Breaks Sponsorship Record

Last November's Info Fair supplier exhibition in San Antonio featured 52 sponsoring companies, breaking a record for number of paid sponsorships.

Six companies were Platinum sponsors – the highest level of sponsorship and the most Platinum sponsors in the

history of the exhibition. They were Huntsman, Casey Industrial, Chem-Trend, CMA Engineering, Stratachem Solutions and Westmill Industries. Twenty-six members were Silver sponsors and 17 were Gold. A total of 70 member companies exhibited. A complete list of exhibitors and meeting sponsors can be found on the EWTA web site at www.engineeredwood.org/info-fair.

Metriguard's Jim Logan Receives Bronson J. Lewis Award

Jim Logan, the owner and president of EWTA member company Metriguard Inc. of Pullman, Wash., was honored with the Bronson J. Lewis Award at the APA Annual Meeting in San Antonio, Texas. The annual award is named after the late Bronson Lewis, who served for 24 years as secretary and then executive vice president of APA. The award recognizes individuals for their leadership and outstanding contribution to the industry.

For 42 years, Logan and his company have provided the engineered wood industry with laboratory and production equipment to produce and test lumber, veneer and panels.



Photo courtesy of APA – The Engineered Wood Association

APA Board of Trustees Chairman Tom Temple presents Jim Logan of Metriguard and his wife, Jean, with the Bronson J. Lewis Award.

Two Managers Join Raute Canada Team

Raute Canada Ltd. recently announced that two regional sales managers have joined the Raute sales team. Paul Phillips joins the company as Regional Sales Manager of U.S., South. He brings with him more than 30 years of experience supporting the wood products industry through machinery manufacturing; environmental control equipment supply and systems installation; and regional knowledge of the market. Barry McAllister has

been promoted from his current role at Raute to Regional Sales Manager, Pacific Northwest. He has 25 years of experience in sales as well as a technical background of wood processing machinery.

Samuel Strapping Completes New Install

Samuel Strapping Systems recently completed the installation of a new lumber strapping machine at HW Culp, a Southern Yellow Pine lumber producer based in New London, N.C. The new equip-

ment is able to place a baton on the bottom of the lumber, something the mill's existing equipment was unable to do.

Michelman Opens New Collaboration Center

Michelman recently celebrated the grand opening of its new Advanced Materials Collaboration Center at the company's headquarters in Cincinnati, Ohio. The new center includes six laboratories along with open space and meeting rooms where the company will develop water-based coatings, surface additives and polymers. New simulation equipment allows Michelman to more accurately observe how product solutions perform under actual end-use conditions, and use that information to improve formulations.

HGA Acquires Consulting Firm

Hunt-Guillot Associates recently acquired Baton Rouge, La.-based R&D Consulting, a 30-person engineering consulting firm serving the Gulf Coast petrochemical and fertilizer industries. According to HGA President Trott Hunt, the larger workforce will allow HGA to provide additional services to the company's clients.



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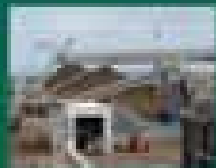
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2015

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- 21-22** 49th Annual International Wood Composites Symposium, Seattle, Wash., woodsymposium.wsu.edu

MAY

- 3-7** Global Forest Products Leadership Summit, Vancouver, B.C., www.forestproductssummit.com
- 11-15** Ligna: World Fair for the Forestry and Wood Industries, Hannover, Germany, www.ligna.de
- 14-16** American Institute of Architects Annual Convention, Atlanta, Ga., convention.aia.org
- 17-19** Hardwood Plywood and Veneer Association 2014 Spring Conference, Monterey, Calif., www.hpva.org
- 5/31-6/3** Composite Panel Association Spring Meeting, Bonita Springs, Fla., www.compositepanel.org

JUNE

- 10-12** Southern Forest Products Association 33rd Forest Products Machinery & Equipment Exposition and Forest Products Society 69th Annual International Convention, Atlanta, Ga., www.sfpaxpo.com, www.forestprod.org/ic/
- 16-21** Vienna International Wood Products/Markets Conference, Vienna, Austria, www.woodmarkets.com

SEPTEMBER

- 2-4** Wood and Bioenergy Exhibition, Jyväskylä, Finland, www.bioenergyevents.fi
- 13-15** Composite Panel Association Fall Meeting, Banff, Alberta, Canada, www.compositepanel.org
- 22-25** 19th International Nondestructive Testing and Evaluation of Wood Symposium, Rio de Janeiro, Brazil, http://abendieventos.org.br/wood_symposium/

OCTOBER

- 7-9** Southern Forest Products Association 2015 Annual Meeting, Myrtle Beach, S.C., www.sfpa.org
- 17-19** Engineered Wood Technology Association Info Fair and APA – The Engineered Wood Association Annual Meeting, Coeur d'Alene, Idaho, www.engineeredwood.org

NOVEMBER

- 11-12** International Fiber/Wood-Based Panels Conference 2015, Chicago, Ill., www.awa-bv.com/events

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To submit letters to the editor:

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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For Info Fair exhibiting information, contact:

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For APA member product questions or assistance:

Contact the APA Product Support Help Desk, 253-620-7400, help@apawood.org.

Mailing and membership lists:

As a matter of policy, mailing lists for this publication are not available. For a listing of members of the Engineered Wood Technology Association (EWTA), log on to www.engineeredwood.org. For a listing of APA members, visit www.apawood.org.

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- Arclin - Performance Applied 12
www.arclin.com
- Ashland Specialty Ingredients 2
www.ashland.com
- BASF - We create chemistry 25
www.basf.us
- Georgia-Pacific Wood Adhesives 17
www.gp-chemicals.com

ASSOCIATIONS

- Engineered Wood Technology Association 46, 48
www.engineeredwood.org

CHIP AND BOARD COATING SYSTEMS

- Spraying Systems Co. 3
www.spray.com

CONTROL SYSTEMS

- ALTEC Integrated Solutions Ltd. 47
www.alteconline.com

CONVEYOR SYSTEMS-EQUIPMENT

- Samuel Strapping Systems 14
www.samuelstrapping.com

CUSTOM MANUFACTURING SYSTEMS

- Raute 41
www.raute.com

ENGINEERING SERVICES

- Evergreen Engineering, Inc. 48
www.evergreenengineering.com
- Hunt, Guillot & Associates LLC 47
www.hga-llc.com

ENVIRONMENTAL

- IES - Integrated Environmental Solutions . . . 15
www.iesclean.com

EQUIPMENT-MACHINERY

- Grenzebach Corporation 28
www.grenzebach.com
- Metriguard, Inc. 28
www.metriguard.com
- Siempelkamp LP 19
www.siempelkamp-usa.com
- Spraying Systems Co. 3
www.spray.com
- USNR 21
www.usnr.com
- Westmill Industries USA Corp. 45
www.westmill.com

EQUIPMENT-TOOLING

- Spar-Tek Industries, Inc. 18
www.spartek.com

INKS

- Samuel Strapping Systems 14
www.samuelstrapping.com

LUBRICANTS

- McLube Division, McGee Industries, Inc. . . . 44
www.mclube.com

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- Samuel Strapping Systems 14
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- Samuel Strapping Systems 14
www.samuelstrapping.com
- Sweed Machinery, Inc. 47
www.sweed.com

NEWS AND INFORMATION SERVICES

- Industry Intelligence Inc. 43
www.industryintel.com

POLYURETHANES

- Hexion Inc. 51
www.hexion.com
- Huntsman Polyurethanes 6
www.huntsman.com

PRINTING AND GRADING

- Claussen All-Mark Inc. 50
www.claussenall-mark.com

RELEASE AGENTS

- SASCO Chemical Group, Inc. 4
www.sascochemical.com

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- Samuel Strapping Systems 14
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SEALERS

- Willamette Valley Company 13
www.wilvaco.com

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www.samuelstrapping.com
- Signode Packaging Systems. 9, 50
www.signode.com

STRUCTURAL/DECORATIVE SHEETS

- Clarke Veneers and Plywood 52
www.clarkeveneers.com

TRAINING-EDUCATION

- University of Tennessee, Center for Renewable Carbon 27
www.spc4lean.com

WAX EMULSION

- Sasol (USA) Corporation. 48
www.sasolwax.us.com

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- Engineered Polyurethane Patching Systems 48
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