

ENGINEERED WOOD

AUTUMN 2012

Journal



HOUSING MARKET REVIEW

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Market Research Director
Craig Adair

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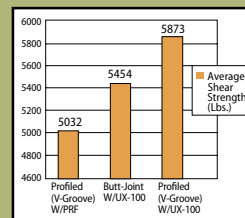
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About the Cover Photo:
A Tacoma, Wash.-area multifamily housing project nears completion. Is the housing market finally showing signs of recovery? See story, page 12.



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PRIME *lines*

Looking Ahead

It seems that with every passing year there's renewed and then dashed hope that the housing market is finally poised to begin recovering from the worst and most protracted slump in decades. Are we there yet?

The *Journal* put that and several corollary questions to APA Market Research Director Craig Adair. His answers are provided in "Housing Market Review," beginning on page 12.

Craig's latest forecast, which will be presented in detail at the upcoming APA annual meeting in Florida, is for U.S. housing starts to reach about 730,000 this year, up 20 percent from 2011. And it looks even better in 2013, with starts climbing to approximately 865,000. Given that housing starts totaled just 554,000 and 587,000 in 2009 and 2010, respectively, it appears that, yes, we are finally climbing out of the housing market hole. Knock on wood.

Also in this issue—and also in the looking-ahead vein—is an article with tips for restarting an idled facility once an economic recovery takes hold and market conditions improve. Written by Jason McIntosh, business development and relationship manager for wood products and bioenergy at EWTA member Hunt Guillot & Associates, "Back Into Service," page 30, is based on a presentation that the author gave at the Panel & Engineered Lumber International Conference & Expo (PELICE) held last spring in Atlanta.

As Jason notes, most companies have guidelines and procedures for starting up new mills or for restarting facilities after short-term curtailments. The industry has less experience, however, with restarting plants that have been idled for as long as many have now been as a result of the long-standing housing market downturn. With housing now finally appearing to be on the rebound, his topic is timely.

Welcome, Sheila Cain

Speaking of looking ahead, there's a change coming to the *Journal*.

Having edited this magazine for the past 15 years—both as APA's industry communications director and more recently as an independent contractor to EWTA—I've concluded it's time to give someone else a shot at the editorial helm. (And coincidentally to spend more of my winters in Arizona.)

That someone else—Sheila Cain—comes highly qualified and experienced. Sheila holds a degree in journalism from Gonzaga University in Spokane, Wash.; worked for a number of years as a community newspaper reporter and in company communications positions; served for six years as editor of *Northwest Construction* magazine, published by The McGraw-Hill Companies; and for the last several years has operated her own freelance writing business, with clients primarily in the construction industry.

In addition to taking over as editor of the *Journal*, beginning with the spring 2013 issue, Sheila is assuming primary responsibility for numerous other EWTA communications functions, including the *Connections* newsletter, annual report, media relations and various support and consulting duties. She can be reached at sheila.cain@apawood.org. You can also meet her personally at the APA annual meeting on Amelia Island in November.

I am pleased to be leaving both the *Journal* and other EWTA communications functions in such good hands. Welcome, Sheila. And thanks to EWTA Managing Director Terry Kerwood for the opportunity to have helped advance the EWTA mission over the past four years.



Jack Merry
jack.merry@apawood.org

Supreme Court Agrees to Hear Storm Water Runoff Appeal

The U.S. Supreme Court agreed in June to consider an appeal of a 2010 Ninth Circuit Court ruling requiring costly new regulation of forest road storm water runoff. If left to stand, the ruling would require public and private forest road operators to obtain Clean Water Act discharge permits for ditches, drains and culverts.

The ruling, which covers much of the West, overturns 35 years of Environmental Protection Agency practice that has consistently held that forest road storm water runoff is most effectively addressed by state forestry best management practices instead of criteria that apply to industrial facilities, such as factories, mines and chemical plants. The U.S. Forest Service has estimated that if the Ninth Circuit ruling were applied nationally, it alone would have to obtain 400,000 permits.

Beyond the additional regulatory costs and delays, critics argue that the ruling would subject foresters, land owners and local governments to lawsuits under the Clean Water Act's citizen lawsuit provisions, and thus substantially increase the risk of shutting down entire forests and damaging countless businesses and livelihoods.

USGBC Delays Vote on Revised LEED

The U.S. Green Building Council (USGBC) announced in June that it is delaying the vote on its revised 2012 LEED (Leadership in Energy and Environmental Design) rating system for up to one year in order to give stakeholders "more time to absorb the changes we've proposed and to get their businesses ready to take the step with us."

The rating system has received criticism from many, including a bipartisan group of members of Congress, for its refusal to accept all credible forest management certification systems. LEED's current rating system recognizes wood only if it is certified to the Forest Stewardship Council's standard. However, three quarters of U.S. certified forests operate on different standards, primarily the Sustainable Forestry Initiative (SFI) or the American Tree Farm System (ATFS), which are not recognized by LEED.

A letter sent to USGBC President and CEO S. Richard Fedrizzi by seven members of Congress said "there is a continuation (under LEED) of artificial and subsequently irresponsible barriers to products from responsibly managed forests in the United States, which has the adverse effect of prohibiting these products from attaining "Responsible Extraction of Raw Materials" credits toward LEED certification.

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A fifth comment period was scheduled to be open from October 2 through December 10.

Softwood Lumber Board Approves Initial Programs

The Softwood Lumber Board, an industry-funded initiative established to promote the benefits and uses of softwood lumber products in outdoor, residential and nonresidential construction, reported in May it has approved and funded four initial programs.

The funded organizations and programs include the American Wood Council, for work on building standards to encourage acceptance of softwood lumber in the marketplace; WoodWorks, to grow the market share for softwood lumber in light commercial and multi-family construction; the Southern Forest Products Association and the National Association of Home Builders, for a feasibility study on raised floor construction; and the National Post Frame Building Association, to promote the acceptance and expand the use of softwood lumber in post frame construction.

Updates on the Softwood Lumber Board's activities can be found at www.softwoodlumberboard.org.

Wood Products Council Appoints Adrian Blocker U.S. WoodWorks President/CEO

The Wood Products Council (WPC) announced earlier this year the appointment of Adrian Blocker as full-time president and chief executive officer of the U.S.



WoodWorks initiative—a program aimed at encouraging architects, engineers and others to use more wood in nonresidential and multifamily buildings.

The creation of a full-time president and CEO position reflects the transition of WoodWorks from a pilot to a mature national program, the organization said in a news release. WoodWorks' day-to-day leadership was previously undertaken by Dwight Yochim of Vancouver, B.C.-



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based Kelly McCloskey & Associates.

Before joining WoodWorks, Blocker was president of the Riverview Advisory Group and, in that capacity, served as president of the Southern Forest Products Association and director of the Binational Softwood Lumber Council.

A feature article on the WoodWorks program written by Blocker begins on page 26 of this issue of the *Journal*.

Dovetail Partners Redevelops Environmental Education Website

Dovetail Partners, Inc., the Minneapolis-based nonprofit devoted to providing authoritative information on the impacts and trade-offs of environmental decisions, has established a redeveloped website for environmental education resources.

Located at www.forestinfo.org, the site combines information from the Temperate Forest Foundation, which ceased operations in 2010, with resources formerly

located on Dovetail's F.R.E.E. Network site. The redeveloped site provides resources for students, teachers, forestry professionals and others interested in protecting, managing and enhancing the natural environment, Dovetail Partners said.

Dovetail Partners has also produced a new report on the recently completed International Green Construction Code (IgCC) of the International Code Council (ICC). The report, which can be downloaded at www.dovetailinc.org/reports, assesses the impacts the code will have on the selection of building materials for commercial construction.

International Processing Conference Slated for Early November

The 2nd International Conference on Processing Technologies for the Forest and Bio-based Products Industries will take place on November 6-7, 2012 at St. Simons Island, Ga.

The conference, dedicated to the exchange of information and ideas about research on process technologies, quality control, and process improvement, will provide a forum for discussions among researchers, producers and consumers of forest and bio-based products and serve as a catalyst for new research and development. The conference will be of direct benefit to researchers, operations

managers, technical managers and business managers.

The conference is sponsored by the Forest Products Society, University of Tennessee and others. It builds upon the highly successful 1st International Conference on Processing Technologies for the Forest and Bio-based Products Industries held in Austria in 2010. More information can be found at www.ptfbpi.org.

Fields Estate Gifts \$150 Million to Oregon Community Foundation

The Oregon Community Foundation (OCF) announced in May a \$150 million bequest from the estate of Fred W. Fields, the longtime owner of Coe Manufacturing and industry leader who died last December at age 88. The gift, the largest in the foundation's nearly 40-year history, will be used to create the Fred W. Fields Fund at OCF in support of education and arts programs in the state, the foundation said.

With \$1.1 billion in assets, OCF is the largest foundation in Oregon. It disbursed roughly \$86 million in grants and scholarships through various funds in 2011.

"OCF is honored to be the steward of a gift that will annually provide millions of dollars in support for essential education and arts programs in communities across the state," said OCF President and CEO Max Williams. "It is really a gift to Oregon, and will continue the generous spirit of giving personified by Fred and Sue Fields." Sue Fields died in 2010.

SFPA Expo 2013 Info Now Posted Online

Details of the Southern Forest Products Association's Forest Products Machinery & Equipment Exposition—Expo 2013 are available on the association's recently launched website at www.sfpaexpo.com.

The show, scheduled for June 6-7, 2013 at the Georgia World Congress Center in Atlanta, will serve as a marketplace for the wood products industry's equipment and services. Exhibitors will have a chance to meet an audience of management and purchasing executives from around the world.

More than 130 companies exhibited and participated in Expo 2011, displaying equipment and services covering more than four dozen product categories.



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In Memoriam

John Stephens

John Stephens, former president and CEO of Roseburg Forest Products, Roseburg, Ore., died Feb. 6 in Bronxville, N.Y. A group vice president at International Paper prior to joining Roseburg Lumber in 1982, Stephens served with the company until 1991.

Don Deardorff

Donald Ray Deardorff, 83, a past chairman and longtime member of the APA Board of Trustees, died March 15, 2012 at his home in Grants Pass, Ore. He and three partners formed Fourply Inc. (formerly Agnew Plywood) in 1972. In 1981, he bought out the final partner in the business and in 1984 formed Eagle Veneer, which is still in operation in Junction City and Harrisburg. He was Chairman of APA from 1979 to 1981 and was an APA trustee from 1970 through 1998, the longest tenure of a trustee in the history of the association. He also served on the boards of the American Wood Council and the National Forest Products Association (now the American Forest & Paper Association).

Patricia Bowlin

Patricia "Pat" Bowlin, longtime APA staff member, died April 12 in Arizona at the age of 70. She joined APA in 1962 and worked in various publication department production capacities. She later was promoted to office services manager, overseeing the association's in-house print shop and literature distribution operation. She retired in 1998 after 36 years with the Association.

Ike Barber

Irving K. "Ike" Barber, former owner of Slocan Forest Products, Richmond, BC, and prominent Canadian philanthropist, died April 13 in Tsawwassen, BC. He was 89. Barber founded Slocan in 1978. He retired as chairman in 2002 and the company was purchased by Canfor in 2004. He was highly regarded as an entrepreneur and as a generous benefactor of research and education throughout British Columbia.

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HOUSING MARKET REVIEW

An Interview with APA Market Research Director Craig Adair



EWJ: What is APA's latest forecast for housing starts this year and next, and how does it compare with the last couple of years?

ADAIR: It appears that the bottom of the housing cycle was 2009 and 2010, when starts totaled 554,000 and 587,000, respectively. APA is currently forecasting 730,000 housing starts in 2012, up 20 percent from 2011, and 865,000 for 2013, which would represent an 18 percent rise. The forecast for 2013 is dependent on continued momentum in single-family construction. Single-family uses more wood per unit than multifamily and is an important part of the wood industry recovery. Multifamily construction should also increase in 2013, but the rate of increase may slow a bit.

EWJ: How does the APA forecast compare with other housing market forecasts, such as the National Association of Home Builders'?

ADAIR: Our forecast is relatively conservative compared with others. NAHB's latest revised forecast, for example, is

for 752,000 starts this year. The National Association of Realtors forecast is among the highest at 770,000 units for 2012 and Moody's Analytics is at 800,000. The real test is to predict starts in 2013. NAHB is predicting 905,000 starts and others are predicting more than one million next year.

EWJ: What are the assumptions underlying your current forecast?

ADAIR: The forecast assumes that lawmakers will not let the economy grind to a halt by letting pre-planned spending cuts and tax increases take place the first of next year. We also assume that the European financial mess won't spill over to the rest of the world. We're planning for continued slow growth of the economy with GDP growth of 2.2 percent in both 2012 and 2013. Then, 2.8 percent growth in 2014 and more in later years. Inflation should remain in check through 2014 or 2015. The economy is too weak to have much inflation. We expect a relatively high level of unemployment because so much is structural. There is a mismatch

between skills and what business wants. During the housing meltdown and Great Recession, technology has moved ahead and skills have not kept pace or have been lost.

EWJ: How important is housing to the economy?

ADAIR: The National Association of Home Builders reports that new residential construction, which includes single-family, multifamily, manufactured homes, repair and remodeling and brokers' fees, has averaged roughly five percent of gross domestic product (GDP). They also look at housing services, which include rents paid by renters and owners' imputed rents and utility payments. Housing services typically average between 12 percent and 13 percent of GDP. Combined, housing contributes 17 to 18 percent of GDP. In 2010 and 2011, housing contributed just over 15 percent of GDP. So a revival in housing is expected to be a major factor for growing the U.S. economy in the near future.

EWJ: What is the correlation between housing starts and production of oriented strand board, softwood plywood, wood I-joists and other engineered wood products?

ADAIR: Housing starts are extremely important for the demand of most wood products. For example, in 2011, we estimate the following percentages for residential use compared with other domestic markets: I-Joists—90 percent, LVL—85 percent, OSB—46 percent, glulam—42 percent, and plywood—17 percent. Plywood is less dependent on new residential construction because it is also widely used in repair and remodeling, industrial markets and nonresidential construction.

EWJ: What are the trend lines for foreclosures and housing stock inventory, and what do those tell us about the future prospects of the housing market?

ADAIR: In general, housing inventories are retreating and are approaching historically normal levels. Foreclosures have also been declining, although this isn't necessarily good. Banks are reportedly holding thousands of properties in some state of foreclosure and are waiting to see if prices are going to increase in the near future. They'd like to avoid foreclosure and they'd also like to make a profit on properties that they now own. There is a fear of another wave of foreclosed properties coming to market and depressing prices.

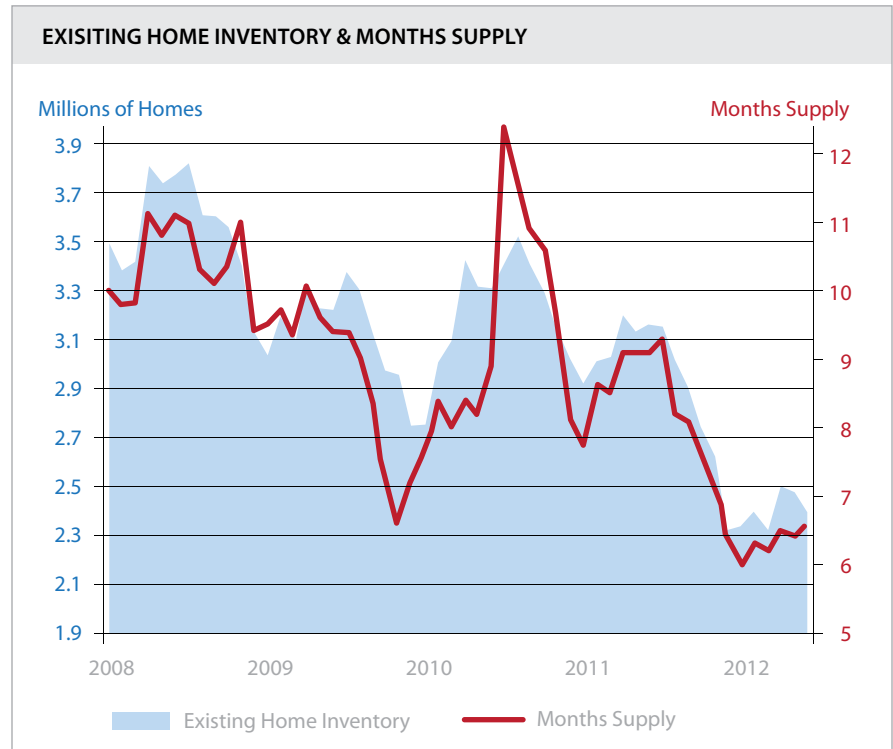
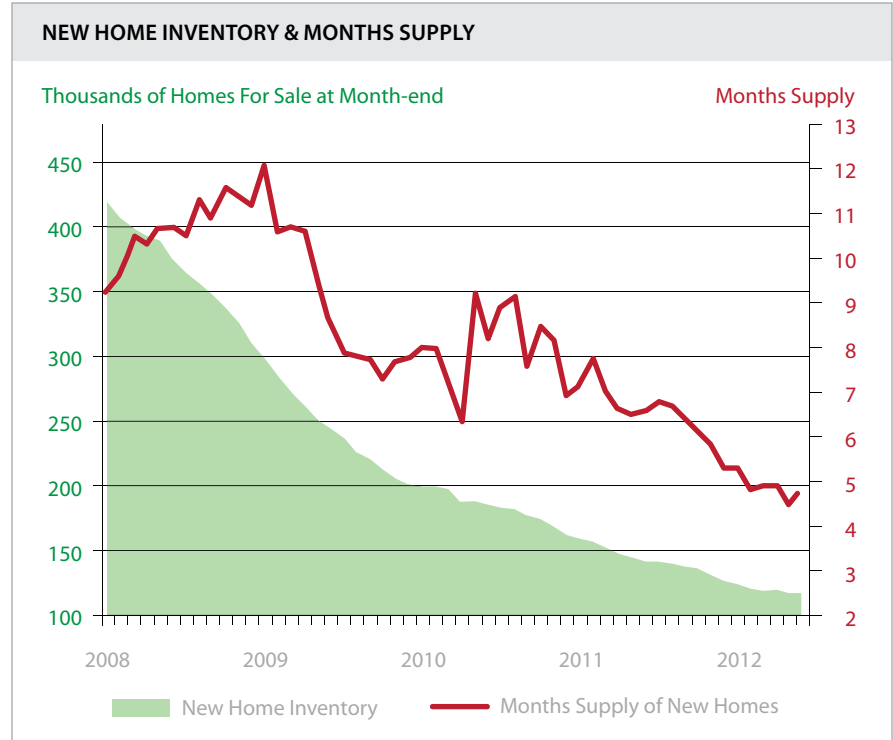
EWJ: Will we ever get back to housing starts at levels of the historical average?

ADAIR: Even considering the current low levels of immigration, the underlying demand for shelter should be in the neighborhood of 1.6 million units per year. Because household formations are lower than in the past and because of economic uncertainty, it's difficult to predict when we'll have a decade that averages what we believe is underlying demand.

EWJ: There have been reports during the last few months of rising rental rates across the country as more young adults, in particular, have turned to the rental market. Is that likely at some point to spur more home sales as the cost of renting approaches or surpasses the cost of ownership, particularly in light of today's historically low mortgage interest rates?

ADAIR: Rental rates have now surpassed the cost of owning and mortgage rates are still under four percent. The Federal Reserve has indicated that interest rates should remain low for quite a while. These developments provide a good background for home buying when

consumers are ready to spend. But that, of course, remains dependent in large part on unemployment trends. Consumers remain worried that the economy is likely to continue struggling for some time, and that places a drag on consumer spending, including home buying.



EWJ: There have also been reports of substantial investor buying in some markets. In Phoenix, for example, one of the worst hit markets, there have been bidding wars on properties for sale this year. And some major builders, such as Beazer Homes USA, are reportedly forming REITs (Real Estate Investment Trusts) to buy distressed residential properties for placement on the rental market. Is that a significant factor in reducing unsold inventories and thus helping the market recover?

ADAIR: That's a factor in some markets, particularly in those where rents have risen sufficiently to provide a good return on investors' cash investments. One of the worries, though, is that investors might put their properties back on the market once values reach a certain point. And that could happen at the same time that banks decide to start marketing more of their foreclosed homes, in which case the inventory could spike again. It's a moving target at this point, and very difficult to assess.

EWJ: The continuing high unemployment and under-employment rates are obvious drags on the housing market recovery. What other factors are holding back the housing market?

ADAIR: Households continue to feel the effects of recession and uncertainty about the future even though the economy has been growing since the third quarter of 2009. The "Great Recession" was laced with major financial troubles and, historically, this type of recession has longer lasting effects than others. Even the homeowners that have been employed throughout the recession have lost wealth and much of that has been in the form of equity in their homes. This reduces the ability to have a large volume of move-up buyers. In addition, consumers and businesses are uncertain about the future and this is holding back investment and big ticket purchases. The presidential election is looming and future tax rates and levels of government spending are unknown. And if Congress kicks the can down the road to put off early 2013 decisions, the psychological burden of government debt and uncertainty will remain.

U.S. HOUSING STARTS (000)


Year	Single-family Starts	Multi-family Starts	Total Starts	Manuf. Homes	Grand Total	Percent Change
2000	1,231	338	1,569	281	1,850	-6.5%
2001	1,273	330	1,603	192	1,795	-3.0%
2002	1,360	345	1,705	168	1,873	4.3%
2003	1,499	350	1,849	131	1,980	5.7%
2004	1,611	345	1,956	130	2,086	5.4%
2005	1,716	352	2,068	148	2,216	6.2%
2006	1,465	336	1,801	118	1,919	-13.4%
2007	1,046	309	1,355	96	1,451	-24.4%
2008	622	284	906	92	998	-31.2%
2009	445	109	554	50	604	-39.5%
2010	471	116	587	50	637	5.5%
2011	431	178	609	52	661	3.8%
2012	500	230	730	55	785	18.8%
2013	625	240	865	58	923	17.6%
2014	780	290	1,070	60	1,130	22.4%
2015	850	325	1,175	65	1,240	9.7%
2016	950	390	1,340	65	1,405	13.3%
2017	920	380	1,300	60	1,360	-3.2%
2018	910	370	1,280	63	1,343	-1.3%
2019	1,075	410	1,485	70	1,555	15.8%
2020	1,200	450	1,650	75	1,725	10.9%

EWJ: What are the long-term demographic factors that bode well or ill for the U.S. housing market?

ADAIR: As baby boomers retire, there will be a gradual effect on housing, with increased demand for multifamily and senior housing. That's one reason the multifamily share of housing starts in our long-range forecasts is higher than in the past. Overall, the echo baby boom is very large and this will provide demand for housing for years to come.

EWJ: What about the size of houses in the future? Any projections there, and how it might affect wood product demand?

ADAIR: Wood product use is very sensitive to house size. U.S. single-family houses peaked at 2,507 square feet in 2007. The size declined in 2008, 2009 and

2010, with the average in 2010 at 2,382 square feet. We saw this as builders trying to provide more affordable homes in a recession. Through three quarters of 2012, house size has averaged over 2,500 square feet and we could have a five- to six- percent increase from 2010. It's possible that the American Dream for a larger house has not died. However, in the future, as energy costs rise and land becomes more expensive, it's also possible that we'll see house sizes moderate. Smaller houses use less wood. However, we can grow the use of structural panel wall sheathing, wood I-joists and raised wood floors. So there is still the potential to increase wood use per square foot of construction and overcome a trend to smaller houses, if it develops. 



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SETTING COURSE

APA Annual Meeting and Info Fair Preview



APA and EWTA members have their sights set on Amelia Island, Fla., where the annual meeting and Info Fair supplier exhibition will focus on the economy and ways to convert opportunities to new business.

The meeting's theme, "Mission: APA—Setting a Course for Better Markets," hints at an agenda filled with optimism.

This year's meeting is Nov. 10-13 at Amelia Island's Ritz-Carlton. The luxury hotel is situated in a pastoral setting on Florida's northern Atlantic coast. Approximately 35 minutes from the Jacksonville International Airport, the resort offers a fitness center, spa, tennis and golf.

The meeting's general session keynote speaker will

attempt to ease the fears of anyone concerned about U.S. prospects for solid economic growth. Ron Insana, a senior analyst with CNBC and a financial industry expert, will discuss the United States' unique position as a country poised to bounce back heartily from the recent economic recession. APA Chair Mary Jo Nyblad and APA President Dennis Hardman will also review the state of the industry and the priorities of the Association.

Timothy Young, Ph.D., a professor at the University of Tennessee Center for Renewable Carbon, will compare bourbon to engineered panels in what promises to be an engaging roundtable session on process improvement. A second roundtable featuring Scott Poole, chief operating officer for RoyOMartin, will deal with capitalizing on emotional intelligence in the workplace.

APA Market Research Director Craig Adair will present his market forecast at the Marketing Advisory Committee meeting. Attendees will also hear the latest updates on wall sheathing promotion, including the new simplified bracing method, and how APA is working to advance industry interests in building and energy codes.

GENERAL SESSION SPEAKERS



Ron Insana
Keynote Speaker



Mary Jo Nyblad
APA Chair



Dennis Hardman
APA President

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Info Fair, the annual product and services exposition sponsored by the Engineered Wood Technology Association (EWTA), will once again feature leading industry suppliers (see the directory of exhibitors, pages 18 – 22).

An all-day Safety and Health Workshop—moved this year to Monday, Nov. 12—will begin at 10:30 a.m., immediately following the general session. Organized by APA's Safety and Health Advisory Committee, the workshop is designed for all levels of personnel with mill safety responsibilities.

The Chairman's Dinner will honor APA members who have made significant advances in mill safety and achieved low incidence rates. Winners of the EWTA Supplier and Innovation of the Year Awards will also be recognized during the dinner.

Business aside, the annual meeting also offers ample opportunity for fun, with luncheons, evening receptions, a cripple coot shoot, and golf and tennis tournaments. And for spouses, a presentation on infused salts and seasonings, together with lunch, will be offered.

Registration begins at the Ritz-Carlton Saturday, Nov. 10 at 10 a.m. See the Schedule of Events at right for a complete meeting agenda. 



Schedule of Events

SATURDAY, NOV. 10

10 am – 5:30 pm	APA Registration Desk opens
10:30 am – noon	EWTA Adhesives and Technical Subcommittee
11 am – 1 pm	International Market Subcommittee (APA members only)
1 – 3 pm	Glulam Management Committee (committee members only)
1:30 – 2 pm	Info Fair Exhibitor Meeting
2 – 4 pm	EWTA Advisory Committee
3 – 5 pm	I-joist Management Committee (committee members only)
5:30 – 7 pm	EWTA Welcome Reception

SUNDAY, NOV. 11

8 am – 1 pm	Golf Tournament
8:30 – noon	Cripple Coot Shoot
9 – 11 am	Tennis Tournament
11 am – 5:30 pm	APA Registration Desk open
2:30 – 4 pm	Nonresidential Market Subcommittee (APA members only)
3 – 5 pm	Industrial Market Subcommittee (APA members only)
5 – 7:30 pm	Info Fair and Reception

MONDAY, NOV. 12

7 – 8:30 am	Buffet Breakfast
8 am – 5 pm	Registration Desk open
8:30 – 10:15 am	General Session - Keynote Speaker: Ron Insana
10:30 am – 5 pm	Safety and Health Workshop
10:30 am – noon	Residential Market Subcommittee (APA members only)
10:30 – 11:15 am	Roundtable Session 1
11:20 am – 12:05 pm	Roundtable Session 2
10:30 am – 2 pm	Spouses' Program: SALT presentation and lunch
noon – 1:30 pm	Buffet Lunch and Info Fair
2 – 4:30 pm	Marketing Advisory Committee
5:30 – 7 pm	Info Fair and Reception
7 pm	Chairman's Dinner and Safety Awards Recognition

TUESDAY, NOV. 13

6 am	Board of Trustees Breakfast (APA Trustees only)
7 am – noon	APA Board of Trustees (APA Trustees only)

Note: APA committee and subcommittee meetings are open to APA members only.



INFO FAIR, held annually in conjunction with the APA annual meeting, is sponsored by the Engineered Wood Technology Association (EWTA), APA's related nonprofit supplier organization. Meeting and event sponsors are highlighted.

The **2012 EXHIBIT FLOOR PLAN** with booth numbers is shown on page 22.

2012 INFO FAIR EXHIBITORS



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Fax: 011-47-3273-5769
Email: tor.gustavsen@argossolutions.no
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We publish six times a year with two separate and dedicated sections - one for forestry and one for wood products processing - we bring you the entire forest industry in one publication. Our new wood-business.ca forestry portal brings together timely news, product releases, video and more when you want and need the information. We cover coast to coast bringing you the unique Canadian perspective.



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 Fax: 608.231-9592
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The Forest Products Laboratory (FPL) is the national research laboratory of the United States Forest Service, which is part of USDA. Since its opening in 1910, the FPL has provided scientific research on wood, wood products and their commercial uses in partnership with academia, industry, tribal, state, local and other government agencies. The focus of the Forest Products Laboratory is to promote healthy forests and forest-based economies through the efficient, sustainable use of the nation's wood resources.

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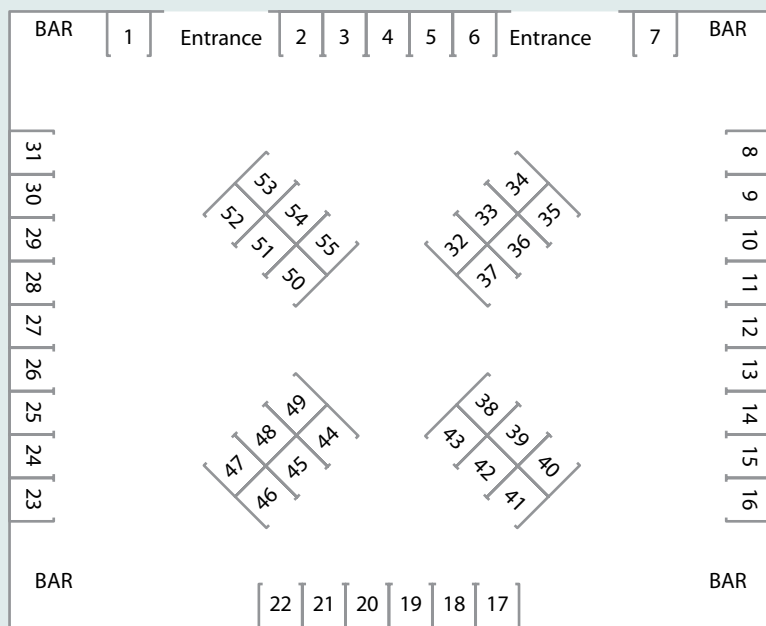
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SUPPLIER STANDOUTS

Congratulations to EWTA 2012 Supplier and Innovation Award Winners



Three EWTA members have been honored by APA mill managers in the annual Supplier of the Year Awards program organized and administered by the Engineered Wood Technology Association (EWTA). A fourth member has won the Innovation of the Year award.

In the Equipment/Tooling category, Ventek, Inc. takes top honors. Momentive Specialty Chemicals, Inc. is the winner in the Materials/Supplies category, and Hunt, Guillot & Associates, LLC takes the top spot in the Consulting/Services category.

USNR has won the Innovation of the Year award.

Winning companies are selected by a vote of APA mill managers. Supplier awards are based on quality and delivery of EWTA member products, equipment and services supplied to APA members. APA mill managers receive ballots and vote for the suppliers they feel best meet the criteria.


Supplier Award runners-up were CARMANAH Design and Manufacturing, Inc. in the Equipment/Tooling Category; Willamette Valley Company in the Materials/Supplies category; and ALTEC Integrated Solutions, Nondestructive Inspection Service, and *Panel World* magazine, who tied in the Consulting/Services category.

Other EWTA members receiving Supplier of the Year votes were BASF

Corp.; Calculated Structured Designs, Inc.; Casco Adhesives; Clarkes Industries, Inc.; Coil Manufacturing, Ltd.; Con-Vey Keystone, Inc.; Electronic Wood Systems, N.A.; Evergreen Engineering, Inc.; Georgia-Pacific Chemicals, LLC; Globe Machine Manufacturing Co.; Huntsman Polyurethanes; Kimwood Corp.; Matthews Marking Products; MEGTEC Systems; Met-Pro; Metriguard, Inc.; Spar-Tek, Inc.; Steinemann Technology USA; Top Wood Jobs; USNR; and Valspar Corp.

The Innovation of the Year Award recognizes a company providing a new technology, product or service that has been shown to reduce production costs, increase productivity, improve product quality or in some other way provide a bottom line benefit to APA members. USNR won this year's Innovation award for its six-deck jet dryer (see side story).

Met-Pro Corp. was the Innovation Award runner-up for its high temperature (thermofilic) biofiltration for HAP and VOC control. Both USNR's and Met-Pro's Innovation entries are posted in the Supplier Awards section of the EWTA website at www.engineeredwood.org.

The Supplier of the Year and Innovation of the Year Award winners will be honored Monday, Nov. 12, during the APA annual meeting at the Ritz-Carlton at Amelia Island, Fla. The EWTA Supplier Awards Program is sponsored by Itipack Systems. 

2012 INNOVATION AWARD

USNR: Largest jet dryer ever installed in the southern pine industry

USNR is the winner of APA's Innovation of the Year Award for the largest jet dryer ever installed for the southern pine industry. The six-deck jet dryer, weighing 1 million lbs, will be erected just 300 feet from its final location, taking the place of two veneer dryers and maximizing productivity.

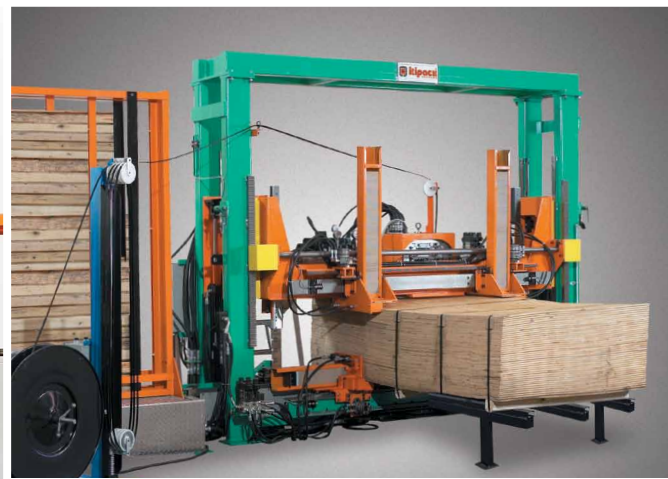
Crews will tow the new dryer into place and connect all services under an expedited schedule of only three weeks—far less time than the 14 to 16 weeks typically required for the erection and start-up of a dryer of this size.

Since the new dryer will be completed outside routine mill flow, the purchaser has the luxury of choosing the best "market" time for his outage. This unique ability to tow erected dryers into location provides plywood manufacturers with cramped space the ability to add dryer capacity without the expense of a new building and expediting cost of 24-hour crews to erect the dryer.

The new dryer replaces two dryers, reducing the historic eight-crew shifts for two dryers to four-crew shifts for one dryer; effectively halving labor cost per M3/8 ft dried. It will process predominantly 1/6 and 1/7 and, to a lesser degree, 1/8 veneers.

Field studies indicate a 10 percent reduction in thermal energy consumption and a 15 percent reduction in dryer exhaust-zero fugitive emission.

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U.S. WOODWORKS

Growing the Market for Wood in the Nonresidential and Multifamily Construction Markets

by Adrian Blocker

For several years, the WoodWorks pilot program has sought to increase wood's share of the U.S. nonresidential and multi-family construction market. Our approach is product-neutral and we have worked to encourage greater wood use on behalf of the entire North American industry, with significant success. As of this summer, WoodWorks field teams were supporting (or had supported) 776 building projects with a value of \$181 million in direct increased sales to the industry—and the same amount or more in indirect sales.

As a result, the board unanimously agreed that WoodWorks should transition from a pilot to mature program. Last year, we expanded to include the Pacific Northwest, Greater Washington D.C. area and Texas. We also increased our focus on building types and systems that research indicated had the strongest growth potential, including mid-rise/multi-family, schools, and building systems such as cross laminated timber, tall walls and panelized roofs.

This year, the program is also transitioning in terms of its leadership. June marked my beginning as president and CEO while, as of July 1, the softwood lumber check-off program has become a significant industry contributor along with our other major funders. Part of my mandate is to reach out to the broader wood industry, including manufacturers, wholesalers, distributors and others in the supply chain to determine how we can work together more effectively to achieve our shared goals.

An example is our Wood Solutions Fairs. How many people are aware that Wood Solutions Fairs attract between 400 and 1,000 architects, engineers and others who attend specifically to learn about wood's design potential? Or that, in addition to a full day of seminars, they include a wood-specific trade show? These cornerstone events allow WoodWorks to address topical issues with quality education that helps people design wood buildings and therefore use more wood.

Exhibitor evaluation forms have consistently shown a high level of enthusiasm about the quality of the audience, but attendees have asked more than once why we don't have a broader selection of wood product and related (or complementary) exhibitors. This is something we can all work together to achieve.

Upcoming Wood Solutions Fairs

Virginia – October 31, 2012
Oakland – January 29, 2013
Atlanta – February 6, 2013
Seattle – February 27, 2013

For information regarding exhibit and sponsorship opportunities, email info@woodworks.org.

In a similar vein, the WoodWorks website (www.woodworks.org) offers a great many resources that we encourage others in the industry to use. Do you know a building designer interested in wood's cost advantage over other materials? Guide them to our online cost calculator developed in partnership with RSMMeans. Users simply select a building type and U.S. average or state/city and the calculator draws on the latest *Costworks* data to provide a comparison of wood and non-wood materials (aggregate of steel and concrete) for the shell or whole building.

Do you have a buyer interested in wood's carbon benefits? Show them the WoodWorks carbon calculator, which estimates the amount of carbon stored in a wood building and the greenhouse gas emissions avoided by using wood instead of steel or concrete. An interest in mid-rise, schools or panelized roofs? Look under Design with Wood for web pages on each of these topics, which feature relevant publications and presentations all in one place.

About WoodWorks

WoodWorks is an initiative of the Wood Products Council, a cooperative venture of major North American wood associations as well as research organizations, government agencies and other funding partners.

WOOD ASSOCIATIONS

- APA
- American Wood Council
- Canadian Wood Council
- Southeastern Lumber Manufacturers Association
- Southern Forest Products Association
- Western Wood Products Association

CURRENT FUNDING AND RESEARCH PARTNERS

- Forestry Innovation Investment
- FPIInnovations
- Natural Resources Canada
- Softwood Lumber Check-off Program
- USDA Forest Service, Forest Products Laboratory

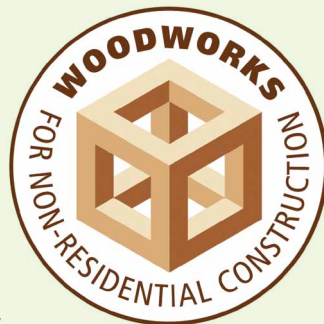




Photo: KC Kim, GB Construction

Mid-rise construction is a WoodWorks focus area because of its considerable market growth potential. Although the International Building Code allows five-story wood buildings and higher (e.g., with the addition of a mezzanine), many designers default to steel or concrete above three or four stories.

If you haven't done so already, I encourage you to browse the site and take advantage of anything we have to offer—even if that just means borrowing some of the information or language we use for your own publications.

How WoodWorks grows the market

WoodWorks' strategy to date has been to focus on priority markets that offer the greatest potential for growth. These currently include: Greater Los Angeles and San Francisco, Georgia, North and South Carolina, Chicago, Southern Wisconsin, Greater Minneapolis, Texas, Washington DC/Baltimore, and the Pacific Northwest.

At the heart of the WoodWorks program is one-on-one project support. Our technical directors make it easier for architects and engineers to use wood by, among other things, helping them understand what's allowed in building codes, solving technical issues and assisting with cost-effective solutions.

The program's influence is then broadened by communicating its successes, transferring the knowledge gained and motivating others to follow. This is accomplished through educational events, earned and social media, trade advertising, direct mail and wood design awards. Program efficiencies are ensured through regular discussion and feedback with partner associations, advisory committees and relevant forest product R&D organizations.

An additional tactic of note involves the pursuit of unique opportunities that have the potential to provide significant benefits. This has included partnerships with 1) a software company to address a lack of wood design software, 2) a consortium of universities to address the lack of wood design education, and 3) two franchises/chains to pursue multiple building conversions simultaneously.

Developing a common message platform

One of the reasons WoodWorks has been successful is that wood construction has

a lot of advantages over the alternatives. It offers a balance of cost, performance and environmental benefits for a wide range of building types, and can be used as a low-carbon alternative to steel or concrete in many applications. The messages communicated by WoodWorks reflect these benefits; however, the way they're presented also reflects years of experience working with architects and engineers to understand their priorities, as well as market testing both by WoodWorks and, more recently, its partners at the reThink Wood initiative (www.rethinkwood.com).

Formed in 2011, reThink Wood is a coalition of interests representing North America's wood products industry. Its goal is to project a unified front and present a common message as it relates to wood performance, cost and sustainability. Although there will always be nuances required for different industry segments, we believe there is significant value in delivering common messages whenever appropriate.

Do you know a project worthy of a wood design award?

WoodWorks is accepting nominations for eight wood design awards, which will be presented to architects and engineers who demonstrate innovation and excellence in the design of wood buildings. The categories are:

- Commercial
- Institutional
- Interior Beauty
- Green Building
- Traditional Use of Wood
- Engineering
- Multi-story
- Schools

There is no cost to nominate a project or individual for a WoodWorks wood design award and multiple submissions are encouraged. Deadline: Entries must be received by November 30, 2012.

For details, visit woodworks.org.



Photo: Jerry Markatos, courtesy DTW Architects and Planners

The Duke School in Durham, N.C., designed by DTW Architects and Planners and Fielding Nair International. As WoodWorks transitions from a pilot to a mature initiative, it continues to focus on building types and systems that have the strongest growth potential, including schools, mid-rise/multifamily, cross laminated timber, tall walls and panelized roofs.



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- Analysts' perspectives on key players
- Product development and enhancements

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At the highest level, WoodWorks and reThink Wood seek to communicate these key messages:

- Wood costs less and delivers more.
- Advanced technology and modern building codes are expanding the opportunities for wood in construction.
- Wood is a renewable and responsible choice that helps reduce our environmental footprint.


These messages are then supported with a series of facts:

- **Wood costs less** – North American wood products offer advantages in terms of material, construction and environmental costs.
- **Wood is versatile** – Wood's design flexibility makes it suitable for a wide range of building types and applications, both structural and aesthetic.
- **Wood meets code** – Today's North American building codes coupled with advances in wood science and building technology have expanded the options for wood construction.
- **Wood is renewable** – Unlike other products that deplete the earth's resources, wood is the only major building material that grows naturally and is renewable. In North America, responsible forest management has resulted in sustainable forests that are legally harvested and managed to meet society's long-term demand for forest products.
- **Using wood helps reduce your environmental impact** – The choice of products used to build, renovate and operate structures consumes more of the earth's resources than any other human activity. When specifying any materials, it is important to consider their environmental impact across their life cycle. Wood products have less embodied energy, are responsible for less air and water pollution, and have a lighter carbon footprint than other commonly used building materials.
- **Wood products play a significant role in a modern economy** – By making forest sustainability and innovation top priorities, the wood products industry will continue to be a significant employer and supporter of rural economies.

These facts are in turn supported with a greater level of detail, which can be found on the WoodWorks and reThink Wood websites (www.woodworks.org, www.rethinkwood.org).

Partnership opportunities

This is an important time for WoodWorks, because of the transition from pilot to mature initiative and because more design professionals are recognizing wood's cost, performance and other benefits in a wider range of applications

and could use our support. I'm looking forward to building on the successes already achieved and to further growing the market for all wood products. To this end, we are actively seeking partners that enable us to leverage our efforts through their networks, ultimately providing a more cost-effective delivery model and accelerating the rate of change. 

Adrian Blocker (adrian@woodworks.org) is president and chief executive officer of the U.S. WoodWorks program.



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BACK INTO SERVICE

Tips on Restarting an Idled Facility

by Jason McIntosh

Let's suppose we wake up tomorrow and discover that housing market demand for wood products has increased faster than the industry can supply. What will we do to meet the demand? Under a worst case scenario, capacity would be insufficient, leaving the door open to foreign imports. Ramping up existing capacity could help bridge some of the supply and demand gap. But getting idled mills back into service will almost certainly be required at some point.

For every manufacturing plant that has been idled since the housing market downturn, there are varying levels and degrees of how they were shut down, how they have been maintained, and how they were planned to be restarted once the time came, if ever.

The facility might have been shut down with the intention of short-term closure. But who knew then when the housing market might recover? It is important, therefore, to know going in what was intended for the mill when it ceased production. Some good questions to ask might be the following:

- Are any personnel who were involved with the plant before it shut down or while it was being shut down available to discuss and review the original plan?
- Was the mill maintained and serviced while down? Was it winterized? Were bearings rolled and motors turned over? Was MCC A/C kept running? Were water systems flushed and fluid loops, such as thermal oil, hydraulic oil and cooling systems, cycled?
- Are there records of upkeep?
- Were inventories depleted to other locations, sold or kept intact?
- What is the shelf life of inventories that were kept or shelf life of items in service when shut down?

Most of the above items might seem elementary, but being thorough beforehand will save time and money on the back end.



The most important aspect of restarting a mill is safety. Do local officials and first responders, including ambulance services, fire departments and local police, know that you now plan to occupy and start work in the facility? This is vital in the event they are needed, even if it is another portion of an existing facility that is still running. A good plan might be to notify and have the agencies tour the facility beforehand to get to know the layout and personnel. Depending on how long the facility has been down, a lot could have changed around your location, including local emergency personnel, entrance roads and routes, train crossings, pipelines, or other factors that might affect response time in case of an emergency. Utility providers also should be notified of your intentions to restart an idled facility.

Fire systems need to be inspected prior to any work, and a good plan put in place to prevent or respond to a fire event. In most companies it is probably policy to have the fire detection and suppression systems online before any work, especially hot work, begins. Check your hoses, reels, nozzles and fire extinguish-

ers and bring them up to date as well.

A good policy is to start day one practicing correct lock out/tag out procedures, hot work permitting along with confined space permitting, and other safety protocols in order to establish a safety culture from the very beginning.

After the safety items are addressed, what next? You really do not know what you have until the facility is cleaned and organized. Define the roles and responsibilities of each person involved in cleaning and organizing production areas. Cleaning will help identify conditions of motors, gearboxes, raceways in conveyors, chains, rollers, belt wear, springs, wiring and so on.

From the cleaning efforts a punch list of each area should be produced. Your basic game plan in place should include:

- Safety work with proper notifications
- Assigning responsibilities
- Cleaning
- Organizing
- Inspecting
- Documenting and reporting
- Repairing
- Inventorying parts
- Powering up islands

Some ideas on how to divide your mill up in order to work through the above-mentioned aspects might include the following equipment islands:

- Raw material receiving through prep
- Wood processing area—debarking, chipping, flaking, peeling or sawing
- Bark processing through heat energy source (furnace, boiler)
- Drying through environmental control equipment
- Screening or dry material storage
- Resin application area or blending if any through your forming or layup area (plywood, OSB, PB or MDF)
- Press for board mills and saws for sawmills
- Finishing and load out areas.

Other areas to consider include:

- Pneumatic systems
- Emergency generators or back-up systems
- Unloading and loading areas
- Rolling stock equipment.


There are, of course, other ways to

divide up work areas and responsibilities. For example, you might organize along group lines, as follows:

- A safety group that covers all electrical inspections, fire house/fire pump conditions, loading and unloading safety devices, deluge systems, communication systems, and other safety-related items.
- A mechanical group that focuses on items such as gearbox inspections, motor inspections, bearing inspections, conveyor inspections, drag chain, furnace intervals, dryer intervals, and all other mill equipment.
- An electrical group that checks out all electrical systems.
- An operational group with responsibility for cleaning and inspecting equipment and aiding the safety, mechanical and electrical groups.

How you approach the restarting process will depend in large part on what resources you have to accomplish the task, including budget and the labor force available to you. A mix of skilled maintenance personnel with key operators and

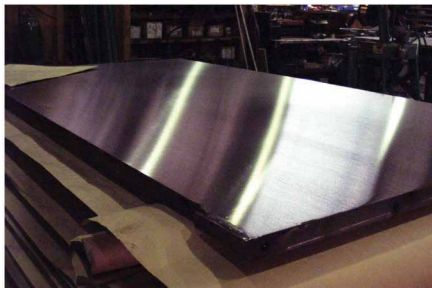
laborers is highly desired, although that ideal may not always be attainable. However, dividing up the mill into smaller areas of focus will allow for better control of the work needing to be done.

Most companies have very good guidelines for start-ups and procedures for bringing mills back online from outages or emergencies. However, our industry has seldom if ever faced the kind of protracted curtailment of the last few years, so there is little in the way of established procedures for getting idled facilities back into service. Establishing those key procedures and defining roles and responsibilities before you get started can make for a more successful restart. 

Jason McIntosh (jmcintosh@hga-llc.com) is business development and relationship manager, wood products and bioenergy, at Hunt, Guillot and Associates, LLC (www.hga-llc.com), a multi-disciplined project management and engineering services company based in Ruston, La.



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SALUTE TO SAFETY

Congratulations to the APA 2011 Safety Competition Award Winners



LP, Nashville, Tenn. and Canfor-LP OSB Limited Partnership, Fort St. John, BC won Safest Company Awards in their respective categories while Roseburg Forest Products Co., Riddle, Ore. earned the coveted Innovation in Safety Award in the 2011 Safety and Health Awards Program sponsored annually by APA for the structural wood panel and engineered wood products industry.

LP, a leading North American manufacturer of structural wood panels and engineered wood products, earned top honors among companies with four or more mills with a 2011 average Weighted Incident Rate (WIR) of 2.35. Canfor-LP, which produces oriented strand board, won its award in the category for companies with three or fewer mills. The company posted a perfect 0.00 WIR for 2011.

Roseburg's Riddle engineered wood products mill took the innovation prize for implementation of the "Glass Walls" program. Every shift in every department has a cell lead that is responsible for monitoring safety, quality, delivery and cost information daily and briefing the rest of the crew through a "Report Out." Safety is the first item of discussion at every Report Out, and each team member is encouraged to voice all safety concerns. Daily safety topics are also discussed. Along with the addition of mini safety audits, the Glass Walls program has significantly increased safety awareness and communication at the Riddle mill.

Innovation Award entries can be

submitted by a mill, a group of mills or an entire company. Eighteen Innovation entries were submitted in 2011 from four APA member companies.

The awards program, begun in 1982, honors the managements and employees of companies and mills with the lowest severity-weighted incidence rates

INNOVATION IN SAFETY AWARD

Roseburg Forest Products Co.

Engineered Wood Products, Riddle, Oregon

Glass Walls Program

SAFEST COMPANY AWARDS

Canfor-LP OSB Limited Partnership

(Companies with three or fewer mills)

AVERAGE WIR

AVERAGE TIR

0.0

0.0

LP

(Companies with four or more mills)

2.35

0.56

ANNUAL SAFETY AND HEALTH HONOR ROLL

Division I (Under 400,000 Hours)	HOURS	WIR	TIR
1st Place LP – Jasper, TX	368,318	0.0	0.0
2nd Place LP – Panguipulli, Chile	342,901	0.0	0.0
3rd Place LP – Hanceville, Alabama	318,584	0.0	0.0
Division II (Over 400,000 Hours)	HOURS	WIR	TIR
1st Place LP – Hayward, Wisconsin	418,624	0.96	0.96
2nd Place LP – Golden, British Columbia	403,043	0.99	0.99
3rd Place RoyOMartin – Chopin, Louisiana	1,628,434	2.82	1.23

THREE-YEAR SAFETY AWARD (2009-2011)

Division I (Under 400,000 Hours)	AVG. HOURS	AVG. WIR	AVG. TIR
LP Panguipulli, Chile	338,163	0.00	0.00
Division II (Over 400,000 Hours)	AVG. HOURS	AVG. WIR	AVG. TIR
RoyOMartin Chopin, Louisiana	1,546,981	8.16	1.57

SAFETY IMPROVEMENT AWARD

Division I (Under 400,000 Hours)

LP – Jasper, Texas

100% Improvement

2009 WIR	2010 WIR	2011 WIR	2009 TIR	2010 TIR	2011 TIR
1.88	0.55	0.00	1.88	0.55	0.00

Division II (Over 400,000 Hours)

RoyOMartin – Chopin, Louisiana

78.09% Improvement

2009 WIR	2010 WIR	2011 WIR	2009 TIR	2010 TIR	2011 TIR
12.89	8.75	2.82	2.06	1.42	1.23

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Bob Swing
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Pat Wright
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based on guidelines established by the U.S. Occupational Safety and Health Administration (OSHA). It employs a Weighted Incident Rate that is calculated using both the number and severity of recordable incidents. Since 2008 was the first year that WIR was used, awards and reports for 2009 through 2011 continue to also show Total Incident Rate (TIR), the measure used in previous years.

Sixty-seven APA member structural wood panel and engineered wood product facilities in the U.S., Canada and abroad participated in the 2011 program. A total of 26 mills representing nine APA member companies—Abitibi - LP Engineered Wood; Anthony Forest Products Co.; Anthony EACOM Inc.; Calvert Company, Inc.; Canfor-LP OSB Limited Partnership; LP; Norbord; Roseburg Forest Products Co.; and RoyOMartin—earned awards in various competition categories of the 2011 program. Some of the mills were multiple award winners.

All major product categories produced by APA's membership were represented among the winning mills, including oriented strand board, plywood, glulam timber, wood I-joists and structural composite lumber.


In addition to the Safest Company and Innovation awards, other competition categories include Safety Improvement, Annual Safety and Health Honor Roll, Three-Year Safety Average, and Incident Free Honor Society. Sixteen mills achieved a zero incident rate for the year and thus were named to the Incident Free Honor Society. The annual honor roll, three-year average and safety improvement categories are divided into two divisions based on hours worked annually—more than or fewer than 400,000 hours.

While the program awards are limited to APA members, data is collected from both member and non-member mills in order to provide a broad-based industry performance benchmark. A total of 89 mills reported data for 2011. The 2011

industry Total Incident and Weighted Incident Rates were 2.31 and 10.37, respectively, down slightly from 2.44 and 10.94, respectively, in 2010.

The winning facilities and companies will be recognized and their safety accomplishments celebrated during the Chairman's Dinner at APA's annual meeting in November on Amelia Island, Florida.

The 2011 safety awards program was the fourth year under a revitalized safety

program effort spearheaded by an APA Safety and Health Advisory Committee comprised of several APA member company safety professionals. Under the committee's guidance, three main goals were established: make the APA program the premier safety awards program in the industry, encourage the sharing of best practices as a means to improve the industry's safety culture and programs, and most importantly, improve the industry's overall safety performance. 

INCIDENT FREE HONOR SOCIETY	Hours	WIR	TIR
LP <i>Jasper, Texas</i>	368,318	0.00	0.00
LP <i>Panguipulli, Chile</i>	342,901	0.00	0.00
LP <i>Hanceville, Alabama</i>	318,584	0.00	0.00
Norbord <i>Nacogdoches, Texas</i>	309,631	0.00	0.00
LP <i>Carthage, Texas</i>	288,089	0.00	0.00
Canfor-LP OSB Limited Partnership <i>Fort St. John, British Columbia</i>	272,506	0.00	0.00
LP <i>Ponta Grossa, PR Brasil</i>	268,612	0.00	0.00
LP <i>Two Harbors, Minnesota</i>	213,321	0.00	0.00
Louisiana-Pacific Canada Ltd. <i>Swan Valley OSB, Minitonas, Manitoba</i>	207,038	0.00	0.00
LP <i>Wilmington, North Carolina</i>	168,970	0.00	0.00
Louisiana-Pacific Canada Ltd. <i>Dawson Creek, British Columbia</i>	144,252	0.00	0.00
Abitibi-LP Engineered Wood <i>Larouche, Quebec</i>	116,000	0.00	0.00
Anthony EACOM Inc. <i>Sault Ste. Marie, Ontario</i>	100,728	0.00	0.00
Abitibi-LP Engineered Wood <i>Saint Prime, Quebec</i>	86,000	0.00	0.00
Anthony Forest Products Co. <i>Washington, Georgia</i>	77,527	0.00	0.00
Calvert Company, Inc. <i>Vancouver, Washington</i>	46,498	0.00	0.00

REINVENTION

Forest Products Society Shifts Mission, Expands Focus

by Sheila Cain

When the Forest Products Society met last June for its 66th International Convention, members noticed a few things were different.

First, the annual meeting was located in Washington, D.C.—the hub of legislative activity. Second, the Society's typical agenda of technical workshops had been expanded to include a visit from U.S. Rep. Glenn Thompson, who delivered the keynote speech. And the agenda was rounded out with sessions that explored the forest product industry's role in a global green economy.

The new venue and expanded political and global focus were deliberate. For the past few years, FPS leaders have been slowly reshaping the vision of the society in hopes that it will eventually become an important informational resource in the world of renewable forest products.

Founded in 1947 as the Forest Products Research Society, FPS has historically served as a technical resource for people in the wood products industry—specifically those in the academic and research/development fields. During its first year, the Society boasted 1,500 members, which also included manufacturers, suppliers and consultants. Membership peaked in 1981 at 4,700 members, but has steadily declined since then. It is represented by 13 local sections and several chapters throughout the U.S. and Canada. Today, FPS membership hovers just under 1,000 members.

FPS leaders are actively trying to boost those numbers by expanding the Society's focus, catching the attention of political movers and shakers, and broadening its mission to keep up with the changing scope of the industry.

"FPS needs to change as the industry changes and how people communicate changes," said Stefan Bergmann, FPS's executive vice president since April of 2009. "If we don't change, we're going to die."

A nationwide trend

Bergmann's words may sound foreboding, but they reflect the concerns felt by many industry associations in numerous industries across the U.S.: a stagnant economy coupled with a shifting approach to information exchange that is resulting in steadily declining membership numbers. In FPS's case, Bergmann attributes fewer mills and a leaner workforce as two big reasons membership has dropped. When cuts need to be made, member allocations for conferences and sponsorships are also often the first to go.

**"The whole
bioenergy arena
is a huge,
growing area."**

— Stefan Bergmann

But perhaps more consequentially, Bergmann and his board realized FPS has slowly been losing touch with advancing technology and the role forest products are playing in the global economy. In earlier years, the Society successfully served an industry that was based on traditional wood products—a focus still supported by FPS, but one that is slowly giving way to broader product types. Today, the materials coming out of forests reach far beyond timber to include all types of renewable cellulosic materials. These materials are being processed using cutting-edge technology to provide a range of bioenergy products, from chemicals to jet fuel. This new industry is vast, and FPS wants to be a part of it.

"The whole bioenergy arena is a huge, growing area," said Bergmann. "Forest-

related products are really something we need to look at seriously. You can grow trees. You can't grow oil."

Rethinking FPS's mission

FPS is in its third year of a deliberate and far-reaching effort to reposition itself as an industry leader, with hopes that an increase in membership—and relevancy—will follow. In early 2010, the board commissioned a series of "listening sessions" overseen by a professional facilitator that included both FPS members and non-members with allied interests. Participants discussed a number of ways that the Society could change for the better; the most momentous arguably being the broadening of the Society's vision and mission to include other cellulosic materials as a major focus.

About the Forest Products Society

Headquarters: **Madison, Wis.**

Founded: **1947**

Number of members:

Approximately **1,000**

Types of members: private and public research and development, industrial management and production, marketing, education, government, engineering and consulting



Want to know more?

Read more about the Forest Products Society's efforts to expand its vision and mission on its website:

www.forestprod.org. Click on the "Our new Vision and Mission" link.

The listening sessions also revealed a desire among members to broaden the scope of partners the Society works with to include professionals such as wood engineers, the construction industry and architects.

The inclusion of the design and construction community is something close to the heart of current FPS Executive Board President Patrice Tardif, an architect and consultant to the wood products industry. She would like to see more communication between the research community and the designers and builders who use wood products.

“If we get these two facets more aligned, we can ensure the research that does go on is pertinent to what’s needed in this industry,” says Tardif.

Tardif, based in Montreal, is also leading FPS’s effort to create a green building products “clearing house”—an online resource for the North American design community that would include sustainable wood products to satisfy LEED, Green Globes and a number of other “green” rating systems.

“It would be a one-stop shop for wood products,” Tardif says.

“We want them to call us”

While FPS is not and has no desire to be a lobbying organization, the listening session participants discussed opportunities for the Society to play a larger role in the formation of sound public policy as it relates to renewable cellulosic materials. Bergmann envisions FPS engaging more broadly in such topics; eventually becoming the “go to” association for expert opinion.

“We want that person on Capitol Hill, when they’re wrestling with a forest product issue, to think, ‘Isn’t there an organization out there?’” says Bergmann. “We want them to call us.”

Bergmann hopes to further boost FPS’s relevance by getting involved in discussions about sustainable disaster relief housing. FPS’s headquarters office partnered with the Society’s eastern Canadian section last October on a conference that explored ways for the wood products industry to quickly offer shelter

to victims of natural disasters, such as those affected by the recent earthquakes in Haiti and Japan.

“On the surface, the issue seems far removed from wood products, but the reality is that agencies and organizations need the ability to rapidly supply relief housing,” says Bergmann. “The conference focused on how we can use wood in those structures.”

FPS is in the final stages of putting together a report about the conference that will be distributed to select policy makers in Washington, D.C. and the Parliament in Canada.

What’s next?

Feedback on the Society’s mission and vision changes has been mostly positive, says Bergmann. While it’s too early to measure success through numbers (membership remains steady), Bergmann has heard good feedback from members on a number of points. They’ve been pleased with a new suite of marketing materials, along with a redesigned website launched in 2011. New tools

The man behind the mission: Stefan Bergmann



Stefan Bergmann, the Forest Products Society’s executive vice president, joined the association in April of 2009. Before that, he was the executive director of the Great Lakes Forest Alliance, a group of state foresters and other stakeholders in Michigan, Wis-

consin, Minnesota and Ontario that identifies opportunities to work across state and federal lines to support sustainable forestry in the upper Midwest.

Bergmann received his bachelor’s degree in wildlife science from Oregon State University in Corvallis, Ore., and earned his master’s in forest resources. His graduate work focused on the challenges of cross-boundary fire management among state and federal agencies and adjoining private landowners, and involved the in-depth examination of legal, social, cultural and policy issues.

Bergmann, 38, has two sons and lives in Madison, Wis.

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continue to be added to the site, including a carbon calculator that helps determine the carbon offset realized through the use of wood versus concrete or steel. A job board was also recently launched and an online database of all Forest Products Society publications will be released this winter.


Putting the plan in place

The next steps in the Society's recent visioning and strategic planning process, says Bergmann, include completing the strategic implementation plan. The plan will include specific, measurable actions

along a timeline in support of short- and long-term strategic goals aligned with FPS's new vision and mission. As the plan is further developed, Bergmann and board members will be offering opportunities for feedback from members and others.

Bergmann is motivated by the Society's recent forward-moving changes and has high hopes for FPS's continued growth. But he knows the hard work has only just begun. He's firm in the belief that the Forest Products Society as an association must continue to expand its materials focus, engage its members and

push to become a leader in the field of renewable cellulosic materials if it's going to survive.

"It's critical we look at innovations in the field and align ourselves with important topics people care about," says Bergmann. "This will help us fulfill our public mission and be sustainable in the long term." 

Sheila Cain (sheila.cain@apawood.org) is assistant editor of the Engineered Wood Journal.

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New System Report for Simplified Wall Bracing Method Published by APA

Following a multi-year research and testing program carried out by the Association, APA has published a new System Report detailing a simplified wall bracing method using continuous wood structural panel sheathing.

APA System Report SR-102 (APA Simplified Wall Bracing Method Using Wood Structural Panel Continuous Sheathing) provides building officials, builders and designers with an approach and the supporting technical information to more easily meet the requirements of the 2012 International Residential Code (IRC) Simplified Wall Bracing (Section R601.12). In developing the System

Report, APA's technical staff modified the IRC Simplified Wall Bracing to increase its applicability to a greater percentage of home designs. To provide greater architectural latitude, the SR-102 method calls for continuously sheathed wood structural panel bracing with an increased sheathing thickness and a closer nailing schedule on the first story of a two-story structure.

APA staff will be educating builders, code officials and designers on the use of the simplified wall bracing method through meetings, webinars and the website.

- Paneltech Products (www.paneltechintl.com), a manufacturer of high performance panel overlays located in Hoquiam, Wash.
- Veneer Services (www.veneerservices.com), a Franklin, Ind. provider of new and used mill machinery, parts, supplies and related services.
- Nondestructive Inspection Service, a Hurricane, W. Va.-based testing equipment inspection company.
- Daqota Systems (www.daqota.com), a full-service automation and systems engineering firm based in McKinleyville, Calif.

APA Set to Participate at IBC Final Action Hearings

APA technical staff are set to collaborate with the American Wood Council to once again protect and advance wood industry interests at the 2015 International Building Code (IBC) Final Action Hearings scheduled for Oct. 24-28 at the Portland Convention Center in Portland, Ore.

The hearings, which will finalize IBC code changes for adoption in 2015, follow an overall successful wood industry effort at the IBC Development Hearings held last spring in Dallas, Texas, where more than 1,000 code change proposals were presented and debated. Those hearings covered issues in the code categories of general, fire safety, means of egress, existing buildings and structural.

Most of the proposals that were considered positive for the industry were approved while the vast majority of negative proposals were rejected. The decisions from those hearings, however, have been subject to public comment challenges that could be heard and debated in Portland.

EWTA Adhesives Subcommittee Changes Name, Broadens Scope

The EWTA Advisory Committee voted in July to change the name and broaden the scope of its Adhesives Subcommittee.

The subcommittee was established in 2007 to provide a forum for review and discussion of industry adhesive issues.

APA Launches New Site for Building and Design Professionals

APA Designers Circle, a new online information and educational resource for architects, engineers, builders and code officials located at www.apawood.org/DesignersCircle, was launched earlier this year by APA.

Registration for the site is free and subscribers to the program have access to a one-stop online resource center offering timely technical information and recommendations for wood frame construction, news updates and an industry calendar of events. The site also includes links to a broad range of product and design recommendations from multiple sources. Educational opportunities, including the ability to earn continuing education credits through online training and webinars, are planned.

APA Designers Circle replaces and expands the offerings of APA's Professional Associates program, which had 1,142 members. Design professionals who are members of APA's Professional Associates are automatically enrolled in the APA Designers Circle program. A variety of promotional tactics are planned to build membership.

Several Companies, Organizations Join EWTA

Several companies and organizations have joined EWTA since last spring. They include:

- The Center for Renewable Carbon (CRC), a sustainable biomaterials and bioenergy research facility at the University of Tennessee in Knoxville. Among other activities, CRC (www.spcforwood.com) conducts industry training programs in statistical process control and design of experiments.
- Canadian Forest Industries/Canadian Wood Products (www.woodbusiness.ca), the Simcoe, Ontario-based publication of the Canadian forest and wood products industry.
- Advanced Mill Solutions LLC (www.admillsol.com), a Eugene, Ore. provider of dryer parts, rebuilds and engineering services.
- JAX, Inc. (www.jax.com), a full-line lubricant manufacturer with expertise in compounding high-end synthetic and petroleum lubricants, New Milford, Conn.
- HT Staffing (www.htstaffing.com), a Texas-based total-solutions staffing firm with specialized focus in manufacturing operations, production and engineering.

Under its new mandate, the subcommittee, now called the Adhesives and Technical Subcommittee, is charged with serving as an information clearinghouse on a much broader range of technical issues, including regulatory and technology matters.

The subcommittee will also broaden its membership and seek to expand the number and subject range of technical presentations at its regularly held fall meeting. Other meetings may be called as necessary. The group will also continue to review and recommend research project funding proposals to the EWTA Advisory Committee.

APA Teams with CPA to Measure Methanol Emissions

APA has teamed with the Composite Panel Association (CPA) to conduct tests to measure methanol emissions from typical member products in response to a California consumer protection program that has listed the chemical as causing reproductive toxicity.

Methanol may be emitted by wood and is present in some adhesives. The California Office of Environmental Health Hazard Assessment (OEHHA) proposes to establish Proposition 65 Maximum Allowable Dose Levels for methanol of 47,000 micrograms per day for inhalation and 23,000 micrograms per day for ingestion. The tests being undertaken by APA and CPA will determine whether emissions levels require further industry action, such as a material safety data sheet for occupational settings, or warning labels, retail signs or public advertising for consumer exposures.

The testing is expected to be completed by the end of the year.

SWP Wall Sheathing Market Share Holding Steady, APA Reports

Structural wood panel wall sheathing market share held steady at 81 percent in 2011, and has increased since the housing recession began, according to the results of builder surveys conducted by the National Association of Home Builder

Research Center and published recently by APA.

Although foam sheathing has lost wall sheathing market share in recent years, its share rose one percentage point to 6.5 percent in 2011, and APA cautions that foam sheathing is well positioned to gain additional share as jurisdictions begin enforcing more restrictive energy code requirements.

Assuming 470,000 single-family starts in 2012 and 550,000 in 2013, with an average structural wood panel wall sheathing market share of 78.5 percent, the total wall sheathing opportunity is expected to grow from 1.76 billion square feet (3/8" basis) in 2011 to 1.94 billion feet in 2013, the report notes.

Boise Cascade's I-Joist and LVL Mills Joining APA

Boise Cascade's wood I-joist and laminated veneer lumber mills are joining APA, effective January 1, 2013, the company and APA announced recently.

The addition of the three engineered wood product facilities, located in Lena, Louisiana; White City, Oregon; and St. Jacques, New Brunswick, will increase APA's share of North American I-joist production to 70 percent and of LVL production to 72 percent.

"Not only does this greatly strengthen our voice in representing the interests of the I-joist and LVL industries, it's another building block to a better future for APA

as demand for our members' products continues to improve with the economy," said APA President Dennis Hardman.

All of Boise Cascade's softwood plywood mills—two in Oregon, two in Louisiana and one in Washington—are also APA members.

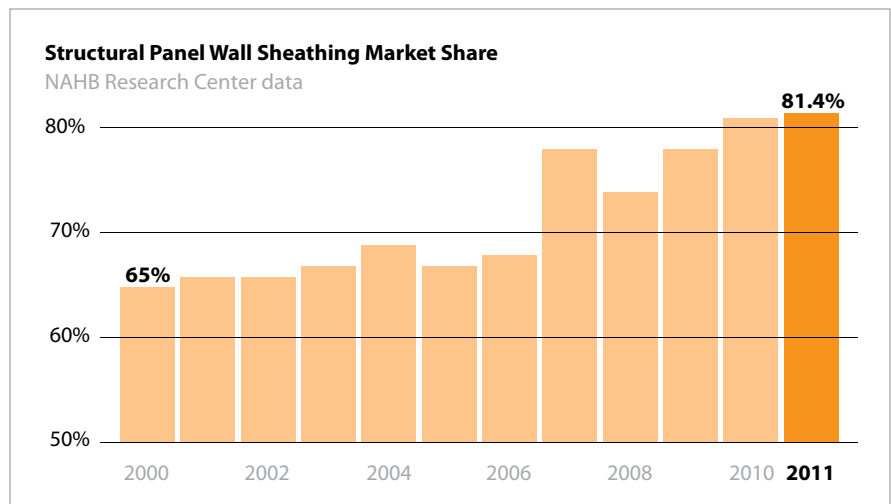
I-Joists Maintaining Single-Family Raised Floor Market Share, APA Reports

Wood I-joist share of the U.S. single-family raised floor market stood at 51 percent in 2011, within the margin of error of the all-time high of 52 percent set in 2010, APA reported in June.

I-joist share of the single-family raised floor market has exceeded 50 percent every year since 2008, except for 2009, when it stood at 45 percent. The 2011 market share represented 243.3 million linear feet of I-joist volume, with 231.5 million linear feet of remaining market share potential.

Concrete slab first floors declined from 52 percent of the market in 2009 to 49 percent in 2010 and to 46 percent in 2011, APA reported. Lumber joists commanded a 38 percent share of the market last year, while wood trusses accounted for 11 percent.

U.S. and Canadian I-joist production totaled 460 million linear feet last year, down nearly two-thirds from the record 1.28 billion linear feet at the height of the housing market in 2004.



Arclin’s Blair Wilding Elected to EWTA Advisory Committee

Blair Wilding, western region sales manager at Arclin, was elected recently to the EWTA Advisory Committee. He succeeds Ted Arnberg, also from Arclin, who resigned his committee seat after assuming new responsibilities in his company.

Wilding, who holds a degree in forest products from the University of Idaho, joined Arclin as a technical service representative in 2002 following several years as the quality assurance supervisor for Willamette Industries’ LVL plant in Winston, Ore. His current position at Arclin includes commercial responsibilities for the western U.S. and western Canada. Wilding has also served on the EWTA Adhesives Subcommittee.

APA Quality Manager Hardie Eubanks Retires

Longtime APA Quality Services Division employee Hardie Eubanks retired Oct. 1.

Eubanks joined APA in 1978 as a Quality Services supervisor following a two-year stint as a phenol/urea-formaldehyde operator with Chembond Corp. He left APA to work as a quality assurance supervisor at Georgia-Pacific Corporation’s Crossett, Ark. plywood mill, but rejoined the Association in 1985 as a quality auditor. He became trademark and training coordinator in 1999 and quality manager in 2003.



“Hardie was instrumental in the adoption of APA Quality Management System (QMS) provisions and assisting mills in improving their processes,” said APA Quality Services Division Director Steve Zylkowski. “His in-depth knowledge of standards and ability to smoothly gain mill implementation of the APA programs has made him a great asset at APA and well respected in the industry.”

For more APA and EWTA news, visit:

www.apawood.org
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Four EWTA Members Pledge Financial Support to Fair Energy Codes Coalition

EWTA members CARMANAH Design & Manufacturing Inc. (www.carmannahdesign.com); Coil Manufacturing, Ltd. (www.coilmanufacturing.com), Georgia-Pacific Chemicals LLC (www.gp-chemicals.com); and Momentive Specialty Chemicals, Inc. (www.momentive.com)

have pledged a combined \$7,000 in support of 2012 program priorities of the Coalition for Fair Energy Codes (CFEC).

Formed last year to safeguard wood industry interests in national and state energy codes, CFEC activities include federal government liaison, monitoring

and attempting to influence state energy codes and legislation, assembling technical data and information in support of credible energy code policy positions, establishing alliances with other industry partners and supporters, and communicating key messages to stakeholder groups.

CFEC's executive director is Tom Kositzky, who also continues to serve as director of APA's Field Services Division.

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GP Chemicals Releases Upgraded Formaldehyde Testing Software

Upgraded software and new technology from Georgia-Pacific Chemicals (www.gp-chemicals.com) enable composite wood manufacturers to address stringent formaldehyde testing requirements with more confidence, the company reports.

The new patent-pending technology for the GP Dynamic Microchamber (DMC) has been shown to improve accuracy to within +/- .005 ppm (when testing in a range of .01 to .2 ppm). As a result, accuracy is enhanced for testing panels for California Air Resources Board (CARB) phase 2 requirements, as well as testing for the more stringent Ultra Low Emitting Formaldehyde (ULEF) Reduced or Exempt standards.

Created by GP Chemicals more than 20 years ago, the GP DMC is a computer-integrated, small scale formaldehyde test system capable of providing emissions results of 11 samples in three-and-a-half hours—more than twice the capability compared to using the ASTM D6007-02 small scale chamber test methodology.

Arclin Acquires Coveright's North American Operations

Arclin (www.arclin.com), a leading provider of innovative bonding and surfacing solutions for the building industry, recently announced it has acquired the North American operations of Coveright Surfaces, including manufacturing facilities in Cobourg, Ontario and Blythewood, S.C.

With the acquisition, Arclin increases its capabilities to supply decorative surface overlays, including decorative

melamine, laminate flooring films and phenolic films, used largely in the manufacture of furniture, cabinetry, fixtures and flooring, the company said.

The combined company will offer an extensive portfolio of overlay products manufactured at five facilities, one located in Canada and four in the United States.

CARMANAH Receives Equipment Order for Russian OSB Mill

CARMANAH Design and Manufacturing Inc. (www.carmanahdesign.com) has received an order to supply equipment to an OSB mill to be built in Russia, the company announced.

The order consists of a 28/81 SmartRing Batch Strander, complete with Batch Feeder and KD6/60DT King Debarker. The project site is located in the Tchaikovsky, Perm region of Russia, east of Moscow.

Delivery of the equipment is scheduled for mid-November.

LP Promotes Luoma, Southern to Senior VP Positions

Louisiana-Pacific Corp. (www.lpcorp.com) has promoted Brian Luoma to the position of senior vice president and general manager, engineered wood products, and Brad Southern to senior vice president and general manager, siding.

Luoma joined LP in 1987 and has headed the engineered wood products division since 2006. He has held a variety of positions at LP, including director of forest resources, northern regional operations manager OSB, and more recently vice president of procurement, supply management and logistics. He also previously served as a member of the Engineered Wood Technology Association Advisory Committee.

Southern joined LP in 1999. He has led LP's siding business since 2005 and was previously vice president of specialty operations. He began his career with MacMillan Bloedel as a forester, where he held a variety of positions in forestry, strategic planning, finance, accounting and plant management.

TurboSonic Installation Passes EPA Test

TurboSonic Technologies, Inc. (www.turbosonic.com) recently announced that the latest installation of its catalytic gas treatment technology was officially tested and confirmed to be in compliance with U.S. EPA air pollution control regulations for the plywood and composite wood products industry.

The installation, treating the combined exhaust gases from a particleboard press and dryer to reduce VOC (formaldehyde and methanol) emissions, is the third at Arauco-USA's Moncure, N.C., wood panel production facility. The other installations, treating exhaust gases from a medium density fiberboard dryer and press, were previously tested and also determined to be in compliance with applicable regulations.

Osmose Acquired by Oaktree Capital Management Funds

Osmose, Inc. (www.osmosewood.com) announced it has closed an agreement to be acquired by certain investment funds managed by Oaktree Capital Management LP of Los Angeles.

Osmose President and CEO James Spengler will continue to serve in the same capacity, along with Osmose's existing management team, the company reported in a news release. Osmose's innovation and strong brand recognition attracted Oaktree to join with Osmose's management to pursue strategic growth paths, Spengler said. Oaktree is "committed to investing in Osmose to help us expand our product and service offerings," he said.

Met-Pro Launches New Corporate Website

Met-Pro announced the launch of a new corporate website at www.met-pro.com, together with websites for each of the company's individual business units, including Met-Pro Environmental Air Solutions (www.mpeas.com), Strobic Air Corporation (www.strobicair.com), Met-Pro Global Pump Solutions (www.mp-gps.com), Mefiag Filtration

(www.mefiag.com), Keystone Filter (www.keystonefilter.com), and Pristine Water Solutions Inc. (www.pristinewater-solutions.com).

The online initiative was undertaken to strengthen Met-Pro's ability to communicate with investors, customers and business partners, the company said.

Casey Industrial Marks Safety Achievement, Earns Several Awards

Casey Industrial, Inc. (www.caseyind.com) recently completed three years of operations—and more than 4.3 million employee hours worked—without a lost time injury. The company has also earned several safety awards recently.

The Associated Builders and Contractors' Rocky Mountain (Colo.) Chapter awarded the firm's senior safety manager, John Wardlaw, the 2012 Safety Professional of the Year at its safety awards banquet in May. The firm was also honored with an "Outstanding Safety Program: General Contractors with over 750,000 Man Hours" award, as well as a Platinum Designation in the ABC's Safety Training and Evaluation Process (STEP) program.

In still another awards program, Casey was honored by commercial insurer CNA with a "Leadership in Safety" award for the company's efforts to create a safer, more productive workplace; encourage behaviors that prevent unsafe events; and prepare for potential business disruptions.

Arclin Introduces New Brand Name for Suite of Concrete Forming Overlays

Arclin (www.arclin.com) recently announced the launch of the EPIC™ brand name for its line of overlay products for concrete forming panels.

The EPIC overlays bear the company's exclusive E-Gen® designation for enhanced environmental performance. The overlay products extend panel life up to 20 times that of non-overlaid BB Plyform panels, reduce jobsite waste up to 64 percent over non-overlaid panels, are available with FSC-certified papers and made in FSC chain of custody-certified

facilities, and may contribute to LEED credits for waste reduction and materials reuse.

"Arclin has long been the market leader in creating high performance concrete forming products," said Bjorn Wahl, senior vice president, performance products. "Aligning the entire suite of products under the EPIC™ brand name will make it easier for our customers and building supply distributors to differentiate Arclin products that provide even greater value to the market through superior performance, cost and waste reduction, and reduced environmental impact."

Weyerhaeuser Establishes Procurement Preference for American Tree Farm Wood

Weyerhaeuser Company (www.weyerhaeuser.com) announced in July that it has established a preference for purchasing wood certified under the American Tree Farm System®. The decision aligns with the company's commitment to responsible fiber sourcing, the company said in a news release.

The American Tree Farm System, a program of the American Forest Foundation (AFF), is the largest and oldest woodland system in America.

"For more than 89,000 family forest owners sustainably managing 27 million acres of forestland in the American Tree Farm System, the Weyerhaeuser preference for their certified wood can make a real difference in the viability of Tree Farms and the economic health of rural communities," the company said.

All of the timberlands owned or managed by Weyerhaeuser in North America are certified to the Sustainable Forestry Initiative system. In addition, all of the company's North American manufacturing facilities are certified to the SFI Certified Sourcing Standard.

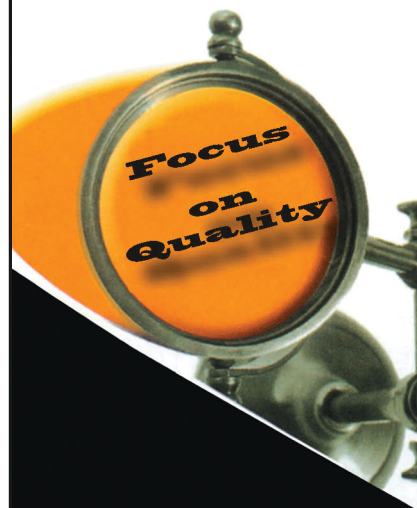
Stantec Achieves ISO Environmental Management Certification

North American design firm Stantec (www.stantec.com) has achieved company-wide certification to the International Organization for Standardization's (ISO) 14001:2004 Environmental Management Systems standard, the company reported.

The globally recognized standard requires an organization to identify potential environmental impacts and establish controls to minimize impacts, monitor and communicate environmental performance, and establish a formal process for continually improving the system.

The certification, which was a strategic objective of the company, was successfully concluded with extensive audits conducted by BSI Management Systems. Stantec's environmental programs include conducting an annual carbon and environmental footprint review of its operations spanning more than 170 locations.

Stantec also announced recently that it has published its 2011 Sustainability Report in which the firm outlines its performance towards environmental, social and economic goals and identifies several areas targeted for improvement.



Continuous Improvement Training Courses at The University of Tennessee

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- 17-19** Panel World Timber Processing & Energy Expo, Portland, Ore., www.timberprocessingandenergyexpo.com
- 24-26** National Lumber and Building Material Dealers Association ProDealer Industry Summit, Savannah, Ga., www.prodealer.com

NOVEMBER

- 6-7** International Conference on Processing Technologies for the Forest and Bio-based Products Industries, St. Simons Island, Ga., www.ptfbpi.org
- 7-8** NAWLA Traders Market, Chicago, Ill., www.nawla.org
- 10-12** APA Annual Meeting and Info Fair, Amelia Island, Fla., www.apawood.org
- 13-15** North American Building Materials Distribution Association Annual Meeting, Orlando, Fla., www.nbmda.org
- 14-16** USGBC Greenbuild International Conference & Expo, San Francisco, Calif., www.greenbuildexpo.org

2013

JANUARY

- 22-24** National Association of Homebuilders International Builders' Show, Las Vegas, Nev., www.buildersshow.com

MARCH

- 12-14** Design of Experiments (DOE) training seminar, University of Tennessee, Knoxville, Tenn., www.spcforwood.com
- 26-28** Statistical Process Control (SPC) training seminar, University of Tennessee, Knoxville, Tenn., www.spcforwood.com

APRIL

- 3-4** International Wood Composites Symposium, Seattle, Wash., www.woodsposium.wsu.edu
- 17-19** International Wood Products Association Annual Convention, Vancouver, B.C., www.iwpawood.org

MAY

- 6-10** LIGNA, Hannover, Germany, www.ligna.de/home
- 7-10** Advanced Statistical Methods and Data Mining training seminar, University of Tennessee, Knoxville, Tenn., www.spcforwood.com
- 9** PwC Global Forest & Paper Industry Conference, Vancouver, B.C., www.pwc.com

JUNE

- 6-7** Southern Forest Products Association Forest Products Machinery and Equipment Exposition, Atlanta, Ga., www.sfpaexpo.com
- 20-22** American Institute of Architects Annual Convention, Denver, Colo., www.aia.org

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