

ARCHETYPE



PRST:STD.
U.S. POSTAGE
PAID
SLC, UT 841
PERMIT 6563

Woodwork Institute
P.O. Box 980247
West Sacramento, CA 95798-0247
Ph: (916) 372-9943 • Fax: (916) 372-9950
E-mail: info@woodinst.com
Internet: www.woodworkinstitute.com

E.B. BRADLEY CO.

Specialty Hardware & Surfacing Products

WILSONART
INTERNATIONAL



Accuride



blum



RED-A-SHELF



Meganite 100% Acrylic Solid Surfacing



**Serving Woodwork Institute
Members throughout California,
Oregon and Washington
since 1929.**

**ONLINE CATALOGUE
WWW.EBBRADLEY.COM**

- View 1000's of products
- Download
 - Material Data Safety Sheets
 - Installation Instructions
 - Specifications
 - Application Information
- Browse
 - By Category
 - By Manufacturer
- Use the advanced search function to find exactly what you are looking for!!

MODERNA



GLUELESS FLOORING SYSTEMS

"First in Quality and Service"

Seattle
(800) 562-8366

Portland
(800) 621-1651

Hayward
(800) 833-6668

L.A./Anaheim
(800) 533-3030

San Diego
(800) 292-9791



inside this issue



18

Published by the

Woodwork Institute

Stanley R. (Rob) Gustafson

CEO/Secretary

PO Box 980247

West Sacramento, CA 95798-0247

(916) 372-9943

Fax (916) 372-9950

Email: info@woodinst.com

Internet: www.woodworkinstitute.com

Editor

Megan White

Advertising Manager

Cici Trino

Association Outsource Services, Inc.

9580 Oak Avenue Parkway, Suite 7-174

Folsom, CA 95630

(916) 990-9999

Fax (916) 990-9991

Layout & Design

Lori Mattas

© 2006 Woodwork Institute

All rights reserved. The contents of this publication may not be reproduced, in whole or in part, without prior written consent of the publisher.

ARTICLE LISTINGS

2006-2007 Officers & Directors	4
Chairman's Commentary	4
Vision & Mission	6
Directors of Architectural Services & Field Offices	6
Seminar Request Form	8
Recreating History through Building	10
Lab Tops and their Complications	12
Shasta Wood Products	18
Hobby to Business: Keys to Success	22
Education to Go	25
Resource Guide/Advertiser Index	26
11th Edition Manual of Millwork Errata List	26



ON THE COVER

Project

UCLA Physics and Astronomy Building

Architect

CO Architects, Los Angeles, Architects

Fabricator/Installer

Spooner's Woodworks, Inc.

Project Statement

The UCLA Physics and Astronomy Building is 116,000 square feet and sits within the historic core of the UCLA campus. The building houses general assignment classrooms for the whole campus, research laboratories, administration offices, as well as faculty and support offices for each of the departmental divisions. The use of cherry wood paneling, doors, and door frames, interior window frames, baseboards, shelving ceilings, and casework throughout the building unifies all the disparate functions into one cohesive whole.

chairman's commentary

Proud to Serve Once Again

I am proud to announce the board of directors has re-elected me to the position of chairman of the Woodwork Institute for the 2006-2007 term. It has been an honor to serve the members of the Institute and I look forward to continuing this into the future.

Our Institute has undergone many changes in the past year and I am proud of the results. I believe the organization is now stronger and I am pleased to be part of such a positive change.

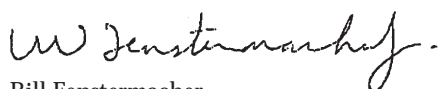
I am also excited about this issue of *Archetype*. It includes something for every reader. Steve Taylor, our exceptional Director of Architectural Services (DAS), has a great article about laboratory countertops. Whether you fabricate, install, or work with this unique surface, you will gain great insight from the article.

The Shasta County Administration Building is featured on page 18. This project was fabricated/installed by Shasta Wood Products. The architect, Les Melburg of Nichols, Melburg, and Rossetto Architects included the Institutes' standards throughout his specifications. This ensured the building would be the highest quality. The project was awarded with both the Bernard B. Barber and Ralph B. McClure awards in 2005. The article gives you a closer look into the construction and planning process of creating this amazing building.

We also take an in-depth look at another construction project on page 10. The HP rehabilitation project gave the Union Planing Mill of Stockton, California challenges but, in the end, they felt it was one of the most rewarding projects. It consisted of updating the structural support and interior/exterior details of the garage and house where Bill Hewlett and Dave Packard created Hewlett Packard. The company they founded started the technology trend in the Silicon Valley and it was important to preserve the buildings as historical landmarks.

Elsewhere in this issue, you will find one of the important services the Woodwork Institute offers. The Institute's Directors of Architectural Services are accredited to teach the American Institute of Architect' (AIA) continuing education courses. These programs can be given to any architectural firm within our service area at no cost. They last about one hour and provide architects with the continuing education credits needed to maintain their license in many states. We have also included a class request form on page 8 to make it convenient to sign up for a class.

If you have ideas for future *Archetype* articles, please send them to me at info@woodinst.com. Until next issue, it's our Woodwork Institute. Help support us and make us strong.



Bill Fenstermacher
2006-2007 Chairman



WOODWORK INSTITUTE OFFICERS & DIRECTORS 2006-2007

OFFICERS/DIRECTORS

BILL FENSTERMACHER
CHAIRMAN/DIRECTOR
Wood Connection, Inc.

BRUCE HUMPHREY
VICE CHAIRMAN/DIRECTOR
Caseworx, Inc.

SKIP SPENCE
TREASURER/DIRECTOR
Custom Plastics

STANLEY R. "ROB" GUSTAFSON
CEO/SECRETARY
Woodwork Institute

MIKE HANSEN
DIRECTOR
S&H Cabinet and Mfg., Inc.

DON LOREY
DIRECTOR
E.B. Bradley Company

DICK McCLURE
DIRECTOR
Union Planing Mill

DENNIS MILSTEN
DIRECTOR
Westmark Products, Inc.

DON NELSON
DIRECTOR
Western Wood

MIKE POLANCHYCK
DIRECTOR
ISEC, Inc.

WAYNE "YOGI" STEINDORF
DIRECTOR
North Coast Cabinetry

FRAN STOOPS
DIRECTOR
RDS Cabinets

To view a listing of members,
please see the website at
www.woodworkinstitute.com

Opinions expressed are not necessarily
those of the Woodwork Institute.
Publication of advertising does not
imply endorsement of products/services.
All advertising copy is subject to the
approval of the Woodwork Institute and
both parties reserve the right to reject
advertising.

CompX[®]press

CompX[®]
NATIONAL

Special keyed pin tumbler locks shipped

NEXT BUSINESS DAY

Quality meets speed

- Master keyed, keyed alike in groups **shipped the next business day**
- **26D – dull chrome finish** available in the CompXpress program; other finishes ship in five business days
- High quality brass construction
- All locks meet WI & ANSI/BHMA standards
- **Manufactured in the US**
- **Rekeying made easy!** Deadbolt locks feature the **Advantage PLUS⁺** system, which allows users to remove the cylinder while the lock remains in place.
- **Two locations:**
Mauldin, SC & Rancho Cucamonga, CA



**WOODWORK
INSTITUTE**
Associate Member

864.297.6655

compX.com

**PO Box 200
Mauldin, SC 29662**

Copyright 2006
© CompX Security Products

Woodwork Institute's Vision & Mission

VISION
Assurance through
certification.

MISSION
To promote to the
architectural design
community, its suppliers
and contractors, the
development and
dissemination
of information relative to
uses, advantages, and
utility of millwork products.
To provide the leading
standards and quality
assurance program for
the architectural millwork
industry through our
Manual of Millwork,
Certified Compliance, and
Monitored Compliance
Programs.

To be the premier,
industry-driven,
equal opportunity,
non-profit trade association
resource provider
for our membership.

WOODWORK INSTITUTE DIRECTORS OF ARCHITECTURAL SERVICES—FIELD OFFICES



OREGON
ANGELO LEANDRO, CSI
2742 Belmont Canyon Rd.
Belmont, CA 94002
(650) 637-9307
Fax (650) 637-9316



NORTHWEST CALIFORNIA
MARK HAWKINS, CSI
19606 Donkey Hill Road
Hidden Valley Lake, CA
95467
(707) 987-3819
Fax (707) 987-3967
mark@woodinst.com



NORTHERN CA
ED HALL, CSI
17455 Anona Court
Grass Valley, CA 95949
(530) 273-4786
Fax (530) 273-6427
ed@woodinst.com



SOUTHERN CA & AZ
ANDREW SEKERES, CSI
2972 C Street
San Diego, CA 92102
(619) 531-0040
Fax (619) 531-0041
andrew@woodinst.com



SOUTHWESTERN CA
STEVE TAYLOR, CSI
734 - 23rd Street
San Pedro, CA 90731
(310) 833-0571
Fax (310) 833-0579
steve@woodinst.com



SOUTHEASTERN CA
& SOUTHERN NV
EVERETT NELMS, CSI
PO Box 8656
Fountain Valley, CA 92708
(714) 379-0410
Fax (714) 379-0480
everett@woodinst.com

ADMINISTRATIVE OFFICE

PO Box 980247, West Sacramento, CA 95798
(916) 372-9943 • Fax (916) 372-9950
info@woodinst.com • www.woodworkinstitute.com



DIRECTOR OF
EDUCATIONAL SERVICES
NICK NICHOLSON, CSI
6003 Del Amo Boulevard
Lakewood, CA 90713
(562) 867-5684
Fax (562) 867-4395



CHIEF EXECUTIVE
OFFICER/SECRETARY
**STANLEY R. (ROB)
GUSTAFSON, CAE, CSI**
PO Box 980247
West Sacramento, CA 95798
(916) 372-9943
Fax (916) 372-9950
rob@woodinst.com

For Your Installation Needs

Parker Woodworking & Construction, Inc. specializes in commercial installation of millwork, casework, T&G ceilings, running trim, epoxy tops and fixtures. We have been in business since 1998 and have built our company one satisfied customer at a time. Our mission is to build solid business relationships and provide outstanding service to our clients.

PWC, Inc. sells Quality, Reliability and Customer Satisfaction. As a Union contractor, our range of services includes:

- **High-End Tenant Improvements**
- **High-End Retail Stores**
- **Public Works**
- **Prevailing Wage**
- **Renovations**
- **New Construction**

Allow us to quote your next project. PWC, Inc. provides quality craftsmanship, competitive pricing and reliability. We pride ourselves in getting the job done right the first time. For additional information and a complete list of references, visit our website at pwcinc.us.



Quality, Reliability & Customer Satisfaction



PWC, Inc.
315 Dunbarton Place
Claremont, CA 91711

www.pwcinc.us

Tel: 909 447 4800
Fax: 909 447 4011
Email: eric@pwcinc.us



PO Box 980247 • 3188 Industrial Boulevard • West Sacramento, CA 95798-0247
(916) 372-9943 • Fax (916) 372-9950 • info@woodinst.com • www.woodworkinstitute.com

WOODWORK INSTITUTE Seminars for AIA CES Credits

At your convenience, the Woodwork Institute will conduct a seminar for one or more participants at your location. Presentations may vary from 45 minutes to several hours; you determine the length of time. The Institute is a Registered Provider of American Institute of Architects (AIA) and their Continuing Education System (CES) program.

SEMINAR TOPICS: (choose as many as you'd like)

- ☐ USE OF THE MANUAL OF MILLWORK
- ☐ THE CERTIFIED COMPLIANCE PROGRAM -- How it Protects You and The Owner
- ☐ THE MONITORED COMPLIANCE PROGRAM -- How it Saves You Money
- ☐ PREPARATION OF ARCHITECTURAL WOODWORK SPECIFICATIONS -- Let the Woodwork Institute's Guide Specifications Work for You
- ☐ WOODWORK INSTITUTE INSPECTION PROCEDURES -- With Actual Sample Products
- ☐ SHOP DRAWINGS -- What are the Minimum Requirements?
- ☐ WOOD VENEERS -- With Veneer Sample Display
- ☐ FIRE RATED WOOD DOORS AND PANELING
- ☐ OTHER: _____

Will attendees be applying for AIA-CES credits? ☐ Yes* ☐ No

* If yes, we will need their AIA membership number at time of seminar.

Requested Presentation Date: _____ Time: _____ Number Attending: _____

Name of Firm: _____ Phone: _____

Name of Contact: _____

Address: _____

NORTHWEST CALIFORNIA & NORTHERN NEVADA
Grass Valley, CA • (530) 273-4786 • Fax (530) 273-6427

SOUTHEASTERN CALIFORNIA & SOUTHERN NEVADA
Fountain Valley, CA • (714) 379-0410 • Fax (714) 379-0480

NORTHWESTERN CALIFORNIA
Hidden Valley Lake, CA • (707) 987-3819 • Fax (707) 987-3967

SOUTHWESTERN CALIFORNIA
San Pedro, CA • (310) 833-0571 • Fax (310) 833-0579

SOUTHERN CALIFORNIA & ARIZONA
San Diego, CA • (619) 531-0040 • Fax (619) 531-0041

OREGON
Belmont, CA • (650) 637-9307 • Fax (650) 637-9316

555 West Danlee Street Azusa CA 91702

HEPPNER

HARDWOODS INC

Pride • Passion • Performance

*Creating precision architectural
wood components for over twenty-five years*



Over three million board feet of
domestic and exotic lumber in stock

custom milling of exclusive architectural woodwork



You won't find any stock numbers
for our mouldings
because we don't make it
until you design it.

Your own signature
architectural mouldings
and inspired decorative trims
are custom milled
to your unique specifications.

We make the pieces in the Masterpieces



St. Regis Resort Monarch Beach Dana Point California



We'll make the pieces.

You make the masterpieces.

555 West Danlee Street Azusa CA 91702



phone 800.266.7983



fax 626.969.8321



www.heppnerhardwoods.com

phone 800.266.7983



fax 626.969.8321



www.heppnerhardwoods.com

Recreating History



Photos courtesy of HP



By Megan White

Sentimental items can tell wonderful stories. However, keeping those items in condition to stand the test of time can be a great challenge. The challenge multiplies when the item is a building. This is exactly what faced the Union Planing Mill when it was awarded the job of restoring a home and garage on Addison Avenue in Palo Alto, California.

But, this was no ordinary house and 12 ft. x 18 ft. garage. It was the place where Bill Hewlett and Dave Packard created Hewlett Packard. The garage is a historical landmark and was in need of great structural repair and internal restoration.

Over the next eight months, employees of the mill worked on every millwork issue for the project. They repaired the wood damage caused by water and termites and installed improvements to prevent future damage. They replaced the wood floors and staircase. Weathered window frames were repaired and new glass was installed.

In addition to working on structural issues, a major goal was to return it to the

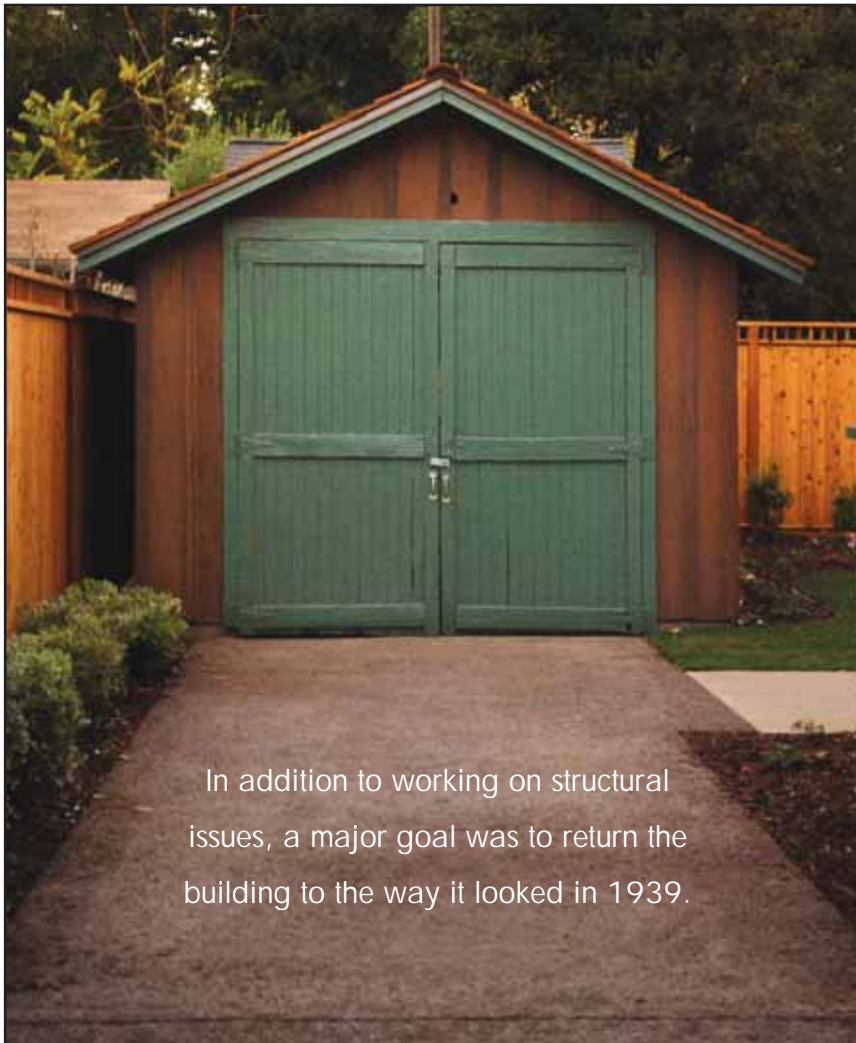
way it looked in 1939. That was the year Mr. Packard and Mr. Hewlett moved into the house and began their business in the garage. This proved to be one of the most challenging and exciting parts of the project.

"Whenever possible, we used the wood that was part of the garage and home already," explained Steve Zarate, who worked on the building for Union Planing Mill. "When the wood was unsalvageable, new wood was used, but it was the same age as the original wood. We were careful how we integrated the new wood into the building. We used old photos as a guide for how things should look. A lot of time and thought was put into making it look exactly as it did over 50 years ago."

Everything from trim to cabinets was rehabilitated. These items were removed from the home and taken back to Union Planing Mill in Stockton, California where employees worked on the pieces. After the items were fixed, they were returned to Palo Alto and installed.

Whenever possible, the house and

Through Building



In addition to working on structural issues, a major goal was to return the building to the way it looked in 1939.

garage were left “as is.” Building upgrades were designed to be unobtrusive and original materials were repaired and reused. Where replacement was needed instead of repair, the new feature had to match the old one exactly in design, color, texture and materials. Because the garage is now a historical landmark, all the rehabilitation was carried out according to the United States Secretary of the Interior’s “Standards for the Treatment of Historic Properties.”

In the end, Steve was very pleased with the work that went into this interesting project. “I was so impressed with the skill of craftsmanship our guys had with this project. We had to make old parts fit with new and repaired items instead of starting from scratch. It was a demanding, but rewarding project to be a part of.”

Putting a fresh face on an old building can be defined many different ways. Restoration, preservation, rehabilitation, and renovation are just a few of the terms thrown around. But, what is the difference between them all?

Restoration - Restoration is bringing something to its former condition. This can only be done if the original materials are available and in good enough condition for use.

Preservation - The goal of preservation is to update a structure so it is safe and intact for years to come.

Rehabilitation - The Secretary of the Interior views rehabilitation as bringing a structure back to the way it looked “during which significant events and activities occurred.” This is the goal with buildings that are historical landmarks.

Renovate - Renovating a building is bringing it back to the state it was in when it was new. Although you do not need to use original materials, any items used should replicate the building’s original look.

By Steve Taylor



Lab Tops



Selecting and specifying laboratory counter tops can be a complicated problem. The selection of materials available changes as new ones are introduced, and others lose their popularity. The materials currently used for laboratory tops differ in chemical resistance, resistance to heat and cold, and in their mechanical properties. In this article, I will attempt to summarize the differences among the most commonly available products: epoxy resin, solid phenolic core (SPC) and plastic laminate (LP).

The Scientific Equipment and Fixture Association (SEFA) has developed a system for testing laboratory surfaces for chemical resistance. The SEFA test requires that the surface be exposed to 49 chemicals, each for 24 hours, then examined for any effect. For each agent, the scoring is: 0 - no detectable change; 1 - slight change in color or gloss; 2 - slight surface etching or severe staining; 3 - obvious and significant deterioration.

Unfortunately, not all manufacturers perform the SEFA test according to the standard. The laminate manufacturers and Epoxyn shorten the test duration to 16 hours. Durcon-Labora-

tory Tops and the laminate manufacturers do not provide data for all the chemicals on the SEFA list. Within these limitations, I have tried to compare the chemical resistance of the various products. The table within this article compares the data for the seven products I have researched. Several of the SEFA chemicals did not have any effect on any of the products. For simplicity, I have deleted those chemicals from the table. Where a manufacturer has not provided data for a reagent, I have indicated "nt" for not tested. The data I have provided is for the black version of each product; other colors may have differing chemical properties.

There are two manufacturers of epoxy resin tops; Durcon-Laboratory Tops, and Epoxyn. Their products have similar, but not identical properties. In the SEFA chemical resistance test, the Epoxyn products failed with exposure to only one agent (Sulfuric Acid, 96 percent), three additional chemicals had a slight effect, and 14 left a visible mark. The Durcon-Laboratory Tops failed for three chemicals, had five level two reactions, and seven additional agents caused a slight change in color or gloss.

and their Complications

Chemical Resistance

Agent	Epoxy Resin		Plastic Lam.		SPC		
	Duron	Epoxyn*	F*	W*	W*	Athlon	Toplab
Acetate, Amyl	1	0	nt	0	0	1	0
Acetate, Ethyl	0	1	0	0	0	1	0
Acetic Acid, 98%	0	0	0	0	0	1	0
Acetone	1	1	0	0	0	1	0
Acid Dichromate, 5%	nt	1	3	nt	nt	0	0
Alcohol, Ethyl	0	0	0	0	0	1	0
Alcohol, Methyl	0	0	nt	0	0	1	0
Ammonium Hydroxide	0	0	0	0	0	1	0
Benzene	0	0	0	nt	nt	0	0
Chloroform	1	1	0	0	0	1	0
Chromic Acid, 60%	3	2	3	1	1	1	0
Cresol	0	1	0	0	0	0	0
Dichlor Acetic Acid	nt	0	nt	nt	nt	1	0
Dimethylformamide	0	1	nt	0	0	0	0
Dioxane	2	0	0	0	0	0	0
Ethyl Ether	0	0	0	nt	nt	1	0
Formaldehyde	0	0	0	0	0	1	0
Formic Acid, 90%	0	0	0	0	0	2	0
Furfural	2	0	0	nt	nt	0	0
Hydrochloric Acid, 37%	0	1	0	0	0	2	0
Hydrofluoric Acid, 48%	3	2	nt	1	1	2	2
Hydrogen Peroxide, 3%	0	1	0	0	0	2	0
Tincture of Iodine	1	0	0	0	0	2	0
Methyl Ethel Keytone	1	1	nt	0	0	1	0
Methylene Chloride	2	nt	nt	0	0	1	0
Mono Chlorobenzene	1	0	0	0	0	1	0
Nitric Acid, 20%	1	1	0	3	3	1	0
Nitric Acid, 30%	nt	1	0	3	3	1	0
Nitric Acid, 70%	2	1	nt	3	3	2	1
Phenol, 90%	0	1	0	1	1	0	0
Phosphoric Acid	0	0	0	0	0	2	0
Silver Nitrate	0	0	0	0	0	1	0
Sodium Hydroxide, 10%	nt	0	3	3	0	0	0
Sodium Hydroxide, 20%	nt	1	3	3	0	0	0
Sodium Hydroxide, 40%	0	0	3	3	0	0	0
Sodium Hydroxide, Flake	0	0	3	3	0	1	0
Sodium Sulfide	0	0	3	0	0	0	0
Sulfuric Acid, 33%	0	0	0	3	3	1	0
Sulfuric Acid, 77%	2	0	0	3	3	1	1
Sulfuric Acid, 96%	3	3	nt	3	3	2	1
Sulfuric Acid, 77%, and Nitric Acid, 70%, equal parts	nt	2	nt	nt	nt	2	0
Total Reactions 3/2/1	3/5/7	1/3/14	6/0/0	10/0/1	6/0/3	0/9/21	0/1/4

Scale: 0 = no effect, 1 = slight change in color or gloss, 2 = Slight surface etching or severe staining, 3 Pitting, cratering, swelling or erosion of coating.

* tested for 16 hour exposure to each chemical, rather than 24.

Epoxy tops have excellent resistance to heat; they pass the SEFA high temperature tests and may be suitable for uses involving prolonged exposure to high temperatures. If flame spread or smoke generation are issues, epoxy resin does not burn. Epoxy tops do not perform as well in extreme cold; they may fail with exposure to dry ice or liquid nitrogen.

An advantage of epoxy resin is its formability. As a cast product, it can be made into sinks and troughs. Tops may be manufactured with raised edges and/or coved backsplashes. Drainage recesses around sinks and other special shapes can be manufactured. Epoxy resin is also homogenous—damage to the surface will not affect its chemical resistant properties.

Installation of large epoxy resin tops must be done in sections. Like all these products, there is a maximum size that can be efficiently manufactured, shipped and installed. Joints between sections of epoxy resin tops must be filled with 1/16 inch to 1/8 inch of epoxy, leaving a wide visible joint between sections.

Color is one of the new trends in laboratory tops. Not so long ago you could have lab tops in any color you wanted as long as it was black. With competition from LP and SPC, the epoxy manufacturers have developed more colors. This increase in design freedom has complicated the selection process because the chemical properties of the various colors are not identical.

There are three Solid Phenolic Core products being marketed for laboratory surfaces. Wilsonart SPC, Trespa Athlon and Trespa Toplab. SPC is similar to laminate in its structure; layers of craft paper are saturated with resin and laminated under high pressure. Unlike laminate, the SPC product is not intended to be bonded to a substrate. SPC is available in thicknesses up to one inch. In laboratory applications, tops are typically 3/4 inch or one inch thick. Like laminate products, the chemical resistance of SPC products is provided by a surface treatment. The Wilsonart product has the same surface coating as that company's Chemsurf laminates. The Trespa products use different technologies, reflected in their performance. The Trespa Toplab performs better than any other product in

the SEFA chemical resistance test. There are no failures for any of the 49 chemicals, and only one level two result (slight surface etching or staining.) Four chemicals produce a visible stain or change in gloss (level one.) Trespa Athlon has no level three reactions (failure), nine level two results, and 23 level one reactions. Wilsonart Chemical Resistant SPC has six failures, no level two results, and three level one reactions.

The three SPC products vary in heat resistance. The Toplab and Athlon pass

the SEFA high temperature tests (crucible and Bunsen Burner) while the Wilsonart must be protected from flame and high temperature. The Athlon and Toplab can be exposed to extreme low temperature, such as dry ice or liquid nitrogen with no ill effect. I have no data for low-temperature exposure for the Wilsonart product. Wilsonart reports a flame spread rating of 55, with a smoke index of 200 for their SPC product. Trespa reports that their Toplab product is self extinguishing, no smoke index is reported. Athlon is

NEW ECLIPSE UNDERMOUNT

- Stylish upgrade for commercial or residential projects
- Fully concealed for safe and sanitary operation
- Premium Easy-Close or Self-Closing options

Accuride®

Accuride International Inc. • 12311 Shoemaker Avenue • Santa Fe Springs • California • 90670
(562)903-0200 • Fax: (562)903-0208 • www.accuride.com
© 2005 Accuride International Inc. U.S. and foreign patents pending.

available with a flame spread rating of less than 30.

Because of the way that SPC is manufactured, it only comes in flat sheets. It is possible to create a built-up edge by mechanically attaching another piece, but sinks, troughs, and other complex shapes are not available. Cove backsplashes may be possible with some products, but not in all thicknesses. Epoxy resin sinks and troughs can be used with SPC tops.

When SPC is installed, joints may be assembled in two ways. A gap, similar to that left in epoxy resin installation, may be filled with epoxy, or a nearly invisible joint may be made using mechanical fasteners similar to those used on LP tops.

SPC products are available in a range of colors and patterns. Toplab offers a color range similar to that offered by the epoxy resin manufacturers. The Wilsonart and Athlon lines offer more extensive selections of colors and patterns. As with all laboratory counter top products, the chemical resistance qualities may vary with color.

Chemical resistant Plastic Laminate offers an economical choice for less demanding environments. Wilsonart and Formica are the two major manufacturers of chemical resistant plastic laminate. Their products presented 10 and six failures, respectively, with the SEFA chemical list. These products are also more likely to be damaged by high temperature than the others.

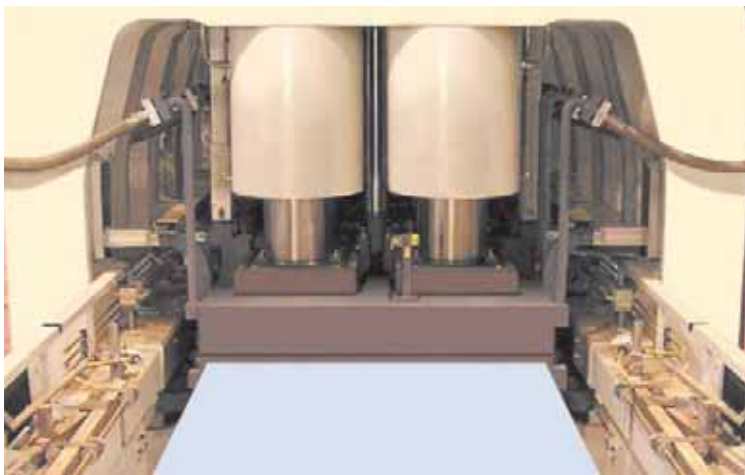
Chemical resistant LP is available in post forming grade, making it possible to build tops with no drip or bull nose front edges and cove back splashes. More complex shapes are not available. Epoxy resin sinks cannot be used with laminate tops, so metal or porcelain sinks must be used. Sinks should either be self rimming or be installed with a separate metal sink ring.

While the other products have recently begun to offer their laboratory surface materials in colors and patterns, the laminate manufacturers have led the way. Wilsonart offers the Chemsurf line of laminate in most of their colors and patterns. Formica manufactures Chemtop2 in 16 colors.

Unfortunately, the perfect laboratory work surface hasn't been developed yet. None of these products will have the ideal combination of attributes for any application. Ideally, the end user of the facility should be involved in the process of making a selection. The chemical, physical, and electrical properties which are important should be determined. If chemical resistance is an important consideration, it may be necessary to get samples of several products and test them with the compounds they are likely to contact. Electrical and mechanical properties may also be important. Whichever product is selected, compromises will have been made.

Note: All of the data for this article has come from the manufacturers or their representatives. While I have tried to be as accurate and thorough as possible, products change constantly. Please verify all data before specifying any product.

When you're under pressure, we deliver the goods.



Western core particleboard, MDF and veneer core laminated with melamine, real veneers or variety coatings from Dynea, Wilsonart and Casco. We've got the technical skill and the world's finest equipment to provide you with great product ready for machining. Delivery by company truck or by rail. Call us for same day quotes, and we'll take the pressure off you.



American Laminates • 3142 Talbot Ave • Riverbank, CA 95367 • Tel 800-800-2536 • Fax 209-869-4040



ARCHITECTURAL WOODWORK ORNAMENTAL METALS
BUILDING SPECIALTIES

Beyond Blueprints

www.lsecinc.com



DENVER SEATTLE LOS ANGELES SAN DIEGO SAN FRANCISCO SACRAMENTO PHOENIX WASHINGTON D.C. MILWAUKEE

Green with Creativity

Specify **green** with the confidence that the leader in MDF is there with a full line of environmentally sound products. SierraPine's specialty product line contributes to achieving **LEED Credits** under Material & Resources and Indoor Environmental Quality. Making the green choice no longer has to limit your **creative** options!

Call or e-mail to find out which panel is right for your next project.
800-676-3339 • info@sierrapine.com

SierraPine
COMPOSITE SOLUTIONS

www.sierrapine.com

innovation technical expertise
creativity manufacturing excellence



Cabinets
Paneling
Display Cases
Mouldings



Medite II-Interior Applications

Countertops
Interior Window Sills
Bathroom Cabinets



Medex-Interior Moisture Applications



Wall Paneling
Display Panels

Medite FR2-Class 1 Panel, U/L Certified



COMMUNITY

Shasta Wood Products **Builds a Center** Dedicated to the Public

By Megan White

Each year the Woodwork Institute bestows the Ralph B. McClure Craftsmanship Award in recognition of outstanding workmanship in the fabrication and/or installation of architectural millwork. In 2005, top honors went to Shasta Wood Products for their work on the Shasta County Administrative Center in Redding, California.



PRIDE

Shasta Wood Products was started by brothers Jeff and Tom Aboud in 1986. They started small, but over the years have expanded, and now employ thirty people. Shasta specializes in the manufacturing and installation of custom, commercial and modular casework. Over the years they have worked on high-end custom homes, hospitals, casinos, and museums. Although they have been in business for twenty years the brothers had never taken on a project with the challenges that they faced with the Shasta County Administrative Center.

THE CENTER

After an extensive study, Shasta County officials found that their current facilities were inadequate and costly to operate and maintain. Departments were separated into numerous buildings instead of in one location. Administrators felt this made it more difficult for the public to get the services they needed in a timely

manner. Also many of these buildings were leased instead of owned by the County, which was not cost effective in the long run.

The study resulted in the idea to create a building that would house many different departments. It would become a one stop shop for the public to get what they needed - from building permits to attending a meeting with their County Supervisor or other public official. This idea became a reality with the design of the three-story, 106,000 square foot Administrative Center. It includes a 160 seat Board of Supervisors' Chamber room, administrative offices, and customer service counters for 12 County departments. It also provides much needed public space for outdoor gatherings and indoor meeting rooms. It currently houses 185 employees, but has a capacity to hold up to 300 as the County grows.

Les Melburg of Nichols, Melburg, and Rossetto Architects designed the build-

ing. The goal was clear- to create a place that is welcoming to the public. Mr. Melburg elaborated, "The client wanted a building that had a warm feel to it. For the Board of Supervisors' Chamber the goal was to have a space that was grand and formal, but also not intimidating. We kept these ideals in mind throughout the design and construction of the Center."

Planning is crucial to any project and Melburg kept that in mind. "I designed some things that I had never tried before, and I'm good friends with the guys at Shasta Wood Products so I asked them if they were possible to construct. They spent a lot of time with me. We worked out things before the final design was even complete, so when we were in the construction phase, all the kinks had been ironed out ahead of time. We had no change orders, which is rare with a project of this size."



CHALLENGES

Although Melburg and the Aboud brothers had the opportunity to collaborate before construction began, it doesn't mean there were not challenges ahead. Chuck Earbarg of Shasta Wood Products, was tasked with the installation of the casework. "It was my first time as the lead on a project of this size, so planning ahead was important. I started working on the Board of Supervisors' Chamber room first. I knew that room would pose the most difficult installation issues, so I wanted plenty of time to work them out."

One such issue was the safety needs for the Board of Supervisors. Their chamber room had to incorporate safeguards against gunfire and assault throughout the walls and dias. The material used as a bullet guard was made of fiberglass. This was installed underneath the wood panels that cover the dias and walls. The challenge with the installation was made greater since the walls of the room are slightly curved, and four sheets of 1/8 inch fiberglass had to be molded to fit the radius.

Additional challenges in the Chamber room were coordinating the audio visual technology. Electrical wires, phone lines, and a data system had to be installed before any casework could be started. The room also incorporates several maple trim profiles set at varying radii, curving

crown molding, removable maple wall panels, and a speaker's podium that can be raised and lowered to meet accessibility requirements for differing public needs. Each of these custom features required forethought and special installation as well as thorough planning.

Shasta Wood Products also completed the millwork installation throughout the rest of the building. This included an extensive handrail/guardrail system throughout the lobby and cap pieces for the carpet base. They analyzed the design for each of the departmental lobbies and found the most simple and effective way of constructing the millwork. They struck the balance of keeping a constant feel to the woodwork throughout the building, but also creating a unique look in each lobby. One way this was done was by using maple wood on the guardrail caps in the main lobby, which was the primary material featured in the Board Chambers. Subtle touches like these created a natural feel and consistent look to the entire project.

COMMUNITY PRIDE

Shasta County Supervisor, Dave Kehoe could not be more impressed with the end result. "The quality of workmanship on this building is second to none. The attention to detail is amazing. It is truly a building that is beautiful and

welcoming to the public."

Shasta Wood Products exceeded their goals and finished ahead of the estimated construction schedule with the Shasta County Administrative Center. The building was completed a month early and was \$500,000 under budget, which is a rarity in government projects. It is a prime example of how planning and creativity came together to accomplish challenging goals.

Each of the parties involved agree the best part of the project was community members coming together to build something important for their County. The building has become a centerpiece of pride for the community and has received numerous awards. "There were mostly local people that worked on this project. Each them took personal pride to make it the best for their community." Melburg stated. "I would walk onto the site and all the craftsman would pull me aside to show me something they had been working hard on. Everyone involved had a great attitude."

Supervisor Kehoe agreed, "The Center is so inviting. It feels like you are entering someone's home. It's how a public building should feel. The residents of Shasta County thank everyone involved in the project for their exceptional work."



Work Smarter. Finish Faster.

Over 30,000 products from
more than 300 manufacturers.

**All the products and support
you need to get the job
done right, now.**

To find out how Louis and Company can
help your business work smarter and
finish faster, call 1-800-903-6046 or
email us at info@louisandcompany.com



retail



institutional



commercial



exhibit

**louis
and company**

"From Our Shelf To Your Shop."

Locations in the West and Southwestern United States.
Visit louisandcompany.com



Trespa- Top Drawer for your Cabinets

Inside and out, cabinets made of Trespa open to a
wealth of smart options. Trespa Athlon easily resists
scratches and stains, chemicals and water. It keeps
its form and color no matter what. Lockers, hospital,
offices, hotels and laboratories, Trespa works any-
where you do. Trespa Athlon is available in 77 colors
including patterns.

Trespa is as easy to machine as hardwood!
Casework solutions begin with Trespa.

Trespa North America
12267 Crosthwaite Circle
Poway, CA 92064

Toll free: 800-4-TRESPA
Fax: 858-679-0440
info@trespanorthamerica.com
www.trespa.com



>> Panelclip®

Panelclip® will securely hang architectural
paneling, elevator cab panels, signs and
artwork. Panelclip® is the extruded
aluminum mounting hardware that has
a 100% positively stopped interlock, pro-
viding the strongest, simplest solutions
for your installation needs.

Panelclip® aluminum hardware is
manufactured by Brooklyn Hardware,
LLC in Portland, Oregon.

For information call **888-232-1151**
and visit **www.panelclip.com**



www.panelclip.com



Hobby to Business: Keys to Success

Woodworking is a passion for many people. Numerous people learned the trade from their father or grandfather and developed their skills in a backyard shed. Beautiful furniture and practical handyman skills can be learned in afternoons of doing something that is an enjoyable hobby. While many people love to keep these skills as a past time, some have turned it into a full time job. Here are few things to consider before you open your doors for business.

Will it still be fun?

It is important to think about what you value about your hobby and how things will change when it becomes a business. Do you

get joy from woodworking because there are no deadlines and it is an escape from everyday life? If so, you might find that opening a business will take the enjoyment out of the trade. However, if pushing to meet a deadline is something that is exciting, starting a business will provide that aspect to your hobby.

A business takes up far more time than a hobby. Consider how you will feel spending hours in the shop. There aren't designated business hours, so it's vital to understand that many evenings and weekends will be spent on the new business.

Ask around

It is important to understand the

woodworking market you will be entering and see if there is a demand for your skill. Something one loves to receive as a gift might not be a steady form of income when people are asked to purchase it. A great way to see if your skill can make money is to ask other business owners in the woodworking trade. Listen to what has worked and failed in the past for them.

Trade associates are also a good way to network with others that have experience in the field. They can share their expertise, point you to valuable resources, and even give tips about where to get discounted machinery and tools. The more you hear about other's missteps, the less likely you are to make them.



Full time or part time?

You don't have to quit your 9 to 5 job if you consider opening your own business. Starting out by working weekends or after work can provide a great testing ground for your new company. This may be more time consuming than just focusing on your business, but it also gives you a great transition from past time to career. Remember, the important thing is that you still enjoy woodworking, even when it goes from a hobby to a job.

GOVERNMENT RESOURCES

The Federal and State government provides services to people interested in starting a business. Many of these resources are offered at little to no cost.

U.S. Small Business Administration – This organization offers business consulting, assistance with writing a business plan, and low-interest loans to individuals opening a business. For more information, visit their website at www.sba.gov.

SCORE – SCORE is made up of retired CEOs and business owners. They can offer practical advice and business counseling to new and potential business owners.

Community Colleges – Many community colleges offer one-day seminars on the nuts and bolts of starting a business. They also have classes on everything from bookkeeping to environmental regulations.



dialock
HAFELE

THE KEY REMEMBERS, SO YOU DON'T HAVE TO.

Lockerlock is secure, flexible, convenient and so easy to use.

Simply present the key, and it will remember your locker number for you.

hafele.com
1-800-423-3531

HAFELE
FINDING BETTER WAYS

The Source for the World's Most Beautiful Woods



Rosewood



Birds Eye Maple



Bloodwood

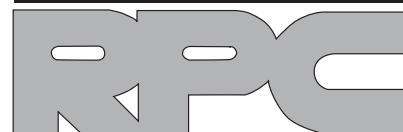


Macassar Ebony

**EXOTIC
HARDWOODS
& VENEERS**

(510) 436-5702

4800 Coliseum Way
Oakland, CA 94601-5010
www.exotichardwoods.com



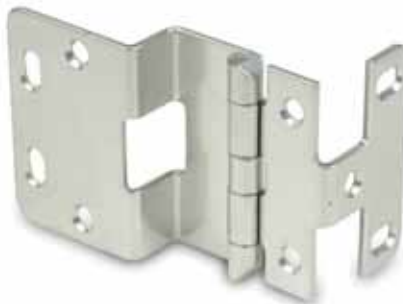
Rockford Process Controls, Inc.
Metal Stampings, Assemblies, Casework Hardware

The Rockford Hinge...Now Even Better

The enhanced 376-Series and 456-Series provide a consistent high quality, smooth operation and precision installation each and every time!

Quality Assured, Made in the U.S.A.

Visit us on the web at www.rockfordprocess.com



2020 Seventh Street • Rockford, Illinois 61104
Phone 815/968-2000 • Fax 815/966-2026



Lyptus® High-Grade Hardwood:
Renewable resources from
sustainably managed forests



Weyerhaeuser
The future is growing™

877-235-6873



**HODGES & RUSSELL
INSURANCE SERVICES**

*W.I.C. SPONSORED
EMPLOYEE BENEFIT SPECIALIST*

Over 25 years of combined insurance
consulting experience

Working together to
offer creative
insurance solutions
for employers for
health, dental, vision,
disability, life and
retirement planning.



*Rated Very High in
Customer Satisfaction*

(707) 525-5710
Fax (707) 525-5718

(800) 743-6975
E-mail: hr@hr-ins.com

W.I.C. receives 1% of all premiums paid on these plans



Education To Go

Most of us have heard the expression “never stop learning.” While few people would disagree with this statement, sometimes it’s easier said than done. That can truly be the case when it comes to taking classes in your chosen field. Many employees and business owners barely have time to make a dent in their to-do list, so taking time off to attend a class is practically out of the question.

In recent years, many education providers have addressed this issue by offering distance education classes. In this case, the teacher comes to the student making it easier for everyone. Classes can be conducted over the Internet or via e-mail.

The American Institute of Architects (AIA) has established this exact program for their members to earn AIA’s Continuing Education Systems (CES) credits. It’s a useful and convenient method for architects to engage in professional development

and earn the credits needed in most states to keep an architectural license. The amount of credits required varies from state to state. Even if you are not housed a particular state, you may still need the required credits to practice in a different state. It is important to stay current on the requirements so you are not short handed at the last minute. AIA’s Continuing Education Department can help figure out the amount of credits you need.

The AIA program is flexible in the formats used for distance learning. Classes can be taken in the more traditional format of a teacher presenting to attendees, but classes are also available via satellite broadcast, over the Internet, and through a CD-Rom format. The important thing to consider is the best learning method for the individual.

Although the information can be presented in many different formats, the quality of the presentation must meet

the high standards of the AIA. In order to become a CES provider, an individual must become registered as a qualified provider and get approval of the information they will be presenting. They also have to evaluate their presentation on a regular basis to make sure it still provides the most up-to-date information. The provider must go through a re-registration process every four years.

Many different classes are offered through the CES program. A complete list can be found on AIA’s website at <http://www.aia.org/ces>. The Woodwork Institute is a registered CES provider for the *Manual of Millwork*, Inspection Issues, and Wood Veneers. A Director of Architectural Services (DAS) presents the class at the request of an architectural firm. The class is usually one hour and can be customized to meet the firm’s specific needs and concerns. After the class is taken, WI contacts AIA with the names of the attendees. Those individuals are then given the credits they have earned automatically.

Everett Nelms, a DAS for WI, has been giving classes for many years now.

“It’s great to present a class in the AIA/CES format,” he says. “I find out what the architects want to learn before I get there so I can incorporate it into my presentation. It really is the best way to inform them about the issues facing their industry.”

RESOURCE GUIDE/ADVERTISER'S INDEX

ARCHITECTURAL MILLWORK

Architeturall Millwork of Santa Barbara
(805) 965-7011
Please see our ad on page 26

Heppner Hardwoods, Inc.
(805) 965-7011
www.heppnerhardwoods.com
Please see our ad on page 9

Isec
(480) 926-1667
www.isecinc.com
Please see our ad on page 17

CABINET LOCKS & SECURITY PRODUCTS

CompX Security Products
(864) 297-6655
www.compX.com
Please see our ad on page 5

COMPOSITE WOOD PANELS & MOULDINGS

Sierra Pine
(916) 772-6586
www.sierrapine.com
Please see our ad on page 17

DISTRIBUTER

E.B. Bradley & Co.
(323) 585-9201
www.ebbradley.com
Please see our ad on page 2

Louis and Company
(714) 529-1771
www.louisandcompany.com
Please see our ad on page 21

ENVIRONMENTALLY CERTIFIED WOOD PANEL PRODUCTS

Roseberg Forest Products
(541) 680-1492
www.rfpc.com
Please see our ad on page 27

HARDWARE LUMBER & MOULDINGS

Lane Stanton Vance
(800) 955-4606
www.lslumber.com
Please see our ad on page Back Cover

HARDWARE MANUFACTURER

Brooklyn Hardware
(888) 232-1151
www.panelclip.com
Please see our ad on page 21

HARDWOOD MANUFACTURER

Exotic Hardwoods & Veneers
(510) 436-5702
www.exotichardwood.com
Please see our ad on page 24

Hafele America Co.
(336) 434-8160
www.hafeleamerica.com
Please see our ad on page 23

Weyerhaeuser Lyptus
(916) 826-1455
www.weyerhaeuser.com
Please see our ad on page 24

HINGES

Rockford Process Control
(815) 966-2000
www.rockfordprocess.com
Please see our ad on page 24

INSURANCE SERVICES

Hodges & Russell
(707) 525-5710
www.hr-ins.com
Please see our ad on page 24

LAMINATED PANELS/SERVICES

American Laminates
(800) 800-2536
www.americanlaminale.com
Please see our ad on page 16

PHENOLIC LABTOPS/WORK SURFACES

Trespa North America, Ltd.
(858) 679-2090
www.trespa.com
Please see our ad on page 21

PRECISION BALL BEARING PRODUCTS

Accuride
888-459-8624
www accuride.com
Please see our ad on page 15

WOODWORK/CONSTRUCTION

Parker Woodwork Construction
(909) 447-4800
www.pwcinc.us
Please see our ad on page 7

ADVERTISER INDEX

Accuride	15
American Laminates	16
Architeturall Millwork of Santa Barbara	26
Brooklyn Hardware	21
CompX Security Products	5
E.B. Bradley & Co.	2
Exotic Hardwoods & Veneers.....	24
Hafele America Co.	23
Heppner Hardwoods, Inc.	9
Hodges & Russell	24
ISEC	17
Lane Stanton Vance	Back Cover
Louis and Company	21
Parker Woodwork Construction.....	7
Rockford Process Control.....	24
Roseberg Forest Products	27
Sierra Pine	17
Trespa North America, Ltd.	21
Weyerhaeuser Lyptus.....	24

For advertising
information contact:

**Association Outsource
Services, Inc.**

9580 Oak Avenue Parkway,
Ste. 7-174

Folsom, CA 95630

Ph: (916) 990-9999

Fax: (916) 990-9991



ARCHITECTURAL

MILLWORK OF SANTA BARBARA, INC.

STATE LICENSE NO. 261772

8 NORTH NOPAL ST. • P.O. BOX 4699
SANTA BARBARA, CA 93140

Manufacturer of Cabinets,
Mouldings and Millwork

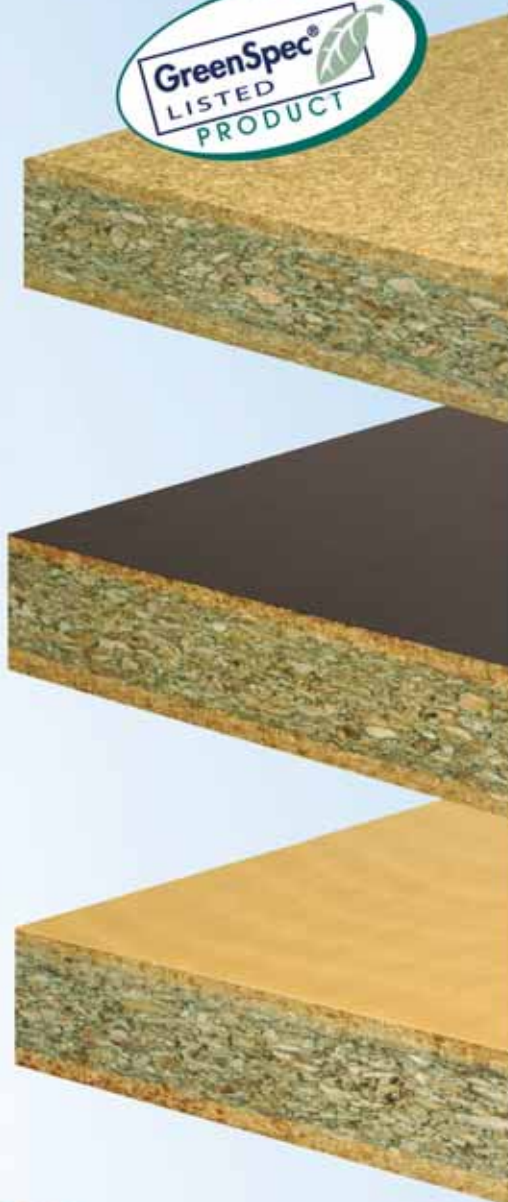
Phone: (805) 965-7011
Fax: (805) 564-8466

11th Edition *Manual of Millwork* Errata

The current errata for the
2001 and 2003
Manual of Millwork may be
found on the Web.

www.woodworkinstitute.com

see greener...



SkyBlend
PARTICLEBOARD

We added LEEDS™ points instead
of urea formaldehyde.
To find out more call 800-245-1115
or visit our website.



ROSEBURG
FOREST PRODUCTS

P.O. Box 1088 • Roseburg OR 97470
www.rfpc.com

Architectural Vision Brought To Life



Beautifully paneled rooms, richly detailed moulding treatments, carefully chosen hardwood elements, all conceived and rendered with professional skill and artistry. At Lane Stanton Vance, we share your passion for Architectural Woodwork. We offer one of America's most extensive inventories of Hardwood Lumber products and extensive milling capabilities. Today, we're busy adding a growing array of value added services like prefinishing and profile sanding. We welcome the opportunity to participate in bringing your vision to reality.

LANE STANTON VANCE

A DIVISION OF BLUELINX CORPORATION

- Los Angeles, CA
- Oakland, CA
- San Diego, CA

800-955-4606
www.lsvlumber.com

- Ventura, CA
- Phoenix, AZ
- Denver, CO