

Hawaii Pacific Architecture

The Journal of the AIA Hawaii State Council • January 1995



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Leadership message

Knowledge is Power

by Stanley S. Gima, AIA
President

The practice of architecture in these litigious times involves much more than we could ever learn in school. Even after spending five years in college learning how to put together aesthetically pleasing buildings that can withstand the elements of nature and meet a client's needs, there is still more to master. After their formal education, architects discover the need to learn about other necessary "real world" elements. This is done through experience, which is sometimes called the "school of hard knocks."

Fortunately, most design professionals are lucky enough to learn from other professionals who are willing to share their knowledge and experience. Thus, we can learn to avoid some of the "hard knocks" ourselves.

This month's issue offers a great deal in the way of "continuing education." It covers topics that the neophyte designer might dismiss as unessential to the average architect's education.

It could be said that topics such as risk-avoidance, litigation and liability insurance should be discussed in the attorneys' magazines, not in ours, right? Wrong! We architects (and especially intern architects) must learn about the latest developments in this area. To turn away and only concentrate on more pleasant, design-oriented topics may someday come back to haunt our architectural careers.

Having access to this kind of information is an important part of an architect's on-going education. Continuing

education is one of the most vital programs that the American Institute of Architects offers its members.

In today's litigious American

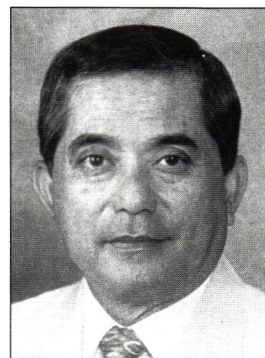
society, laws and lawyers are part of our everyday lives. To be a complete architect, one must be able to deliver designs that are conceived in a client's best interest, and that includes designs that to the best of the architect's knowledge avoid potential lawsuits.

I want to stress again the power of knowledge. The information included in this issue will give aid and comfort to AIA members who take advantage of this opportunity for "continuing their education."

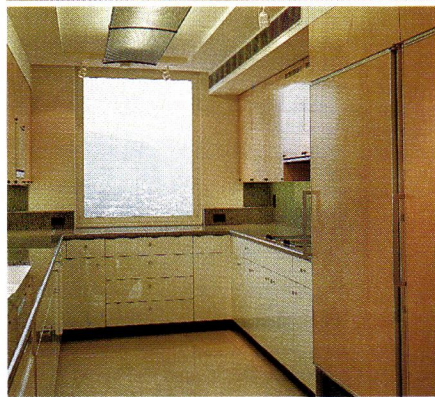
As the New Year begins, we should all continue to look forward to new experiences and learning opportunities.

With 1995 unfolding, I will be closely monitoring the state Legislature to determine how the AIA Hawaii State Council can be more proactive in its legislative efforts. I will also be reporting the results of legislative activities in this magazine and quarterly newsletters.

Aloha and best wishes for the New Year.



Stanley S. Gima



Building Castles in the Sky...

Allied Builders System was pleased to be asked to execute the grand scale remodeling of businessman Robert Taira's 36th story 3,800 sf Waikiki penthouse. Architect Bruce Newell's unique design solution called for demolishing the aging interior and creating a stunning tribute to the *kamaaina* bakery king's many accomplishments.

Today, multi-function cabinetry showcases Taira's extensive art collection, triples home storage and hides infrastructure upgrades. A theater-quality entertainment system and new central air-conditioning, hidden under three-inch ceiling panels also helped pave the way for truly palatial living.

"With the children gone, we opted to have everything light, airy, free-flowing toward the panoramic ocean view," said Taira. "We were thrilled with the plans and even more thrilled with the results..."

Adds Newell: "Allied's reputation for professional organization, quality workmanship and client caring preceded our introduction. They performed as advertised. We look forward to doing business with them again."



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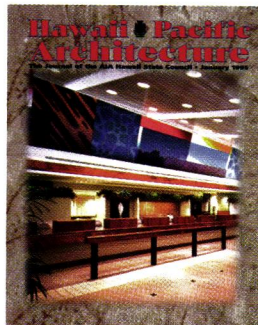
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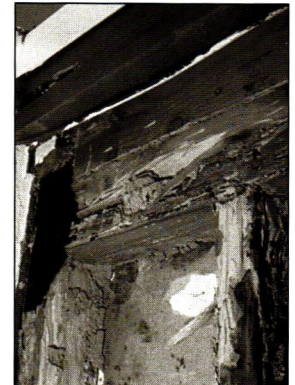
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Cover photo by David Franzen



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IN THIS ISSUE ...

The focus of this issue is risk and, more importantly, risk avoidance. The articles are intended to assist design professionals in risk assessment and avoidance.

Chad Love, an attorney with Love Yamamoto & Motooka, offers suggestions for avoiding lawsuits, while Brad Petrus, an attorney and engineer, discusses builder's statutes. Richard J. Rosenthal, a Realtor® from California addresses mediation as an affirmative business strategy.

Mary Yoshimoto, an account executive with Finance Insurance Company talks about project professional liability insurance.

Although usually viewed as a structural concern, termite infestation and damage can lead to legal problems. Jim Reinhardt, et al. provide insight into this risk.

In thermal and moisture protection, Elmer E. Botsai, et al. discuss moisture vapor penetration.

This month's cover photo is of the First Hawaiian Bank Kailua-Kona branch, an Award of Merit winner in the 1994 AIA Honolulu Design Awards competition, expanded and refurbished by Kajioka Okada Yamachi Architects.

The Hawaiian Tapa design used on the cover and throughout the magazine is courtesy of Bishop Museum.

Preserving Historic Hawaii: A Modern Mystery

If historic preservation of buildings is a big riddle to you help is on the way. Representatives from the National Park Service are offering a slide show and oral presentation on preservation standards established by the Department of the Interior. The half-day workshop is scheduled for Jan. 20, from 9 a.m. to 12:30 p.m. in the Kewalo Conference Room of Ward Warehouse in Honolulu.

Anyone interested in preserving a historic home or structure will benefit from attending. NPS representatives will interpret preservation standards and explain how guidelines affect the local area. Those planning to attend are invited to bring blueprints and project plans for discussion.

This workshop is presented free to the public by the National Park Service and Historic Hawaii Foundation in cooperation with the State Historic Preservation Division. Interested persons may call Historic Hawaii at (808) 593-9564 for more information or reservations.

Design Awards Deadline Announced

The James Beard Foundation has announced that its national 1995 Design Awards entry deadline is Jan. 31. The two categories of entry are for Best Restaurant Design and Best Restaurant Graphics. Both award categories require a \$75 entry fee.

The Foundation, named after the renowned chef and author, has given design awards since 1990. It has several other awards programs which relate to aspects of the culinary art, including a Book Award, Journalism Award and an Electronic Media Award.

The Foundation also offers scholarships and educational opportunities to culinary students and acts as a resource center for the industry.

For more information, contact the Foundation at (212) 620-7027 or write The James Beard Awards, 6 West 18th Street, New York, N.Y., 10011.

Furnishings Software

Emily Zants Associates, Inc. has announced that it is offering proprietary

software which can provide a complete furnishings inventory with costs. It is a stand-alone database designed for use on DOS-based hardware which does not require entering dBase or any other program first.

Data for furniture can be entered once and used for numerous projects as desired. Item codes allow all items to be grouped by manufacturer for producing purchase orders by room, or each item can be listed separately. When a change is made, the program will find all the rooms where an item is located and make the change in all rooms.

The program was developed by local designer Emily Zants.

Duke's Canoe Club Receives Kahili Award



Duke's Canoe Club provides a "Hawaiian" atmosphere.

Duke's Canoe Club, a family-dining restaurant dedicated to Duke Kahanamoku and the preservation of surfing and canoeing, received the 1994 Kahili Award for architecture/interior design in the "Keep It Hawaii" program from the Hawaii Visitors Bureau.

In designing Duke's, president/co-owner Rob Thibaut of TS Restaurants worked closely with interior designer Cheryl Rowley and architect Ted Garduque to create a sense of place.

In the restaurant, walls and dividers are minimal; the main dining room opens directly onto the beach providing a casual, open-air setting and unobstructed views of Diamond Head. Palm palapas

provide cool, comfortable shade on the deck. The decor incorporates nearly 15,000 board feet of koa wood, in addition to lauhala, bamboo, peeled rattan plaiting, Hawaiian fabric upholstery and all-natural stone floors.

Duke's also features a collection of more than 150 historic photos and 40 historic posters, vintage aloha shirts, an antique koa outrigger canoe and paddles and Duke Kahanamoku's personal surfboards that were assembled by the late Tommy Holmes.

Judges for the architecture/interior design category were Cynthia Thompson, Myers Corporation; Chuck Ehrhorn, AIA, The Estate of James Campbell; George Kekoolani, AIA; Frank Brandt, AIA, PBR Hawaii; Dwight Kauahikaua, AIA, Kauahikaua and Chun; and Francis Oda, AIA, Group 70.

The "Keep It Hawaii" program was created in 1991 to reward companies that incorporate the true essence of Hawaii in their businesses.

'Virtual Reality' Architecture

In November 1994, a group of architects, planners and other academics and professionals were treated to a demonstration by UCLA professor Bill Jepson of a system implemented by UCLA for modeling and realistically simulating urban environments.

Drawing from technologies developed for virtual reality and military flight simulation, the system combines relatively simple three-dimensional models with aerial photographs and street-level video images to create a model of an urban neighborhood. The model can then be used for real-time interactive "fly-through" demonstrations which can be used to show alternative solutions within their urban context.

The demonstration was held at the one place in Hawaii, the Manoa campus of the University of Hawaii, which has an Onyx Silicon Graphic work station with the proper hardware to run the programs. Even this work station is not optimally configured for the system.

The specialized texture mapping equipment needed is being considered,

however, for two locations on Maui, including the Maui Research and Technology Center. The system is being used for five "real world" projects now and offers software and a comprehensive methodology which provides another tool to communicate and evaluate alternative proposed environments. The system has provided those projects with a mechanism for including community members in the planning and decision-making process for developments in their area by helping them visualize the effect of various changes.

Using the Title 'Architect'

E. Alan Holl, AIA, secretary-treasurer of the AIA Hawaii State Council, spoke out recently about abuses by some who "willfully or ignorantly call themselves architects; try to practice architecture without a license; or imply that they provide architectural services."

Holl went on to say that anyone who does so is in violation of state law. This is also true for the engineering, landscape architecture and surveying professions. Even if architects are licensed in another state, they cannot legally use the title "architect" and cannot practice architecture in Hawaii until they have been licensed by this state.

"The most obvious offense," Holl said, "is by advertising, from the use of business cards or letterheads with the direct or indirect implication that one is an architect, or that one supplies architectural services." One significant problem area has been the Yellow Pages of the telephone directory where non-licensed people list themselves under the heading "Architects." This occasionally includes legitimate architectural firms which list senior people in their firm who may not be architects. "This is a health and safety issue as much as it is a legal one," said Holl. To be licensed in any of the 55 U.S. licensing jurisdictions, a candidate must pass rigorous tests to demonstrate minimum qualifications in education, training, experience and knowledge.

"With Hawaii's natural hazards—earthquakes, hurricanes, floods, termites and decay—and the human hazards of noise, pollution and fire, it is vital that

the public be aware of what the title 'architect' implies in terms of responsibilities and abilities."

UH School of Architecture



The new building at UH is open for use this semester.

The University of Hawaii School of Architecture was completed in the fall and is open for use this semester.

The 32,000-square-foot structure represents the missing link at the perimeter of the historic old quadrangle, opposite Hawaii Hall, the university's first permanent building. The old quadrangle is flanked by George, Crawford, Gartley and Dean halls.

The three-story, reinforced concrete structure, with parking underneath, houses six design studios, a graphics studio, jury room, two classrooms, three seminar rooms, 200-seat auditorium, gallery, student study and workroom. It also has educational support areas which include a media center, computer lab, environmental systems lab, model shop and faculty, administrative and student services offices and conference rooms.

Dean Raymond Yeh, FAIA, officially accepted the new structure on behalf of the school, faculty and students at a dedication ceremony held in late November.

Solving Design/Construction Problems

After a number of years of inactivity, the American Institute of Architects/General Contractors Association commit-

tee has been reactivated to address those issues in construction that cause problems between architects and contractors. Rod Misawa, AIA and Dan Arana, GCA are co-chairmen. An AIA/GCA partnering workshop was held March 25-26, 1994.

The committee is considering the development of an annual program of workshops, gatherings and dinner meetings so both organizations can better understand and respect the activities of each other. The first jointly-sponsored event was the AIA/GCA dinner meeting held in November at the Honolulu Country Club.

The partnering workshop initially produced a list of problems that contractors cause for architects and a list of problems that architects cause for contractors. These were reviewed in depth with various subcommittees.

In the upcoming months, the following subcommittees will finalize their suggestions and prepare workshops to be held in 1995:

- Development of Trust/Attitudes/Social Activities/Communications (Rod Misawa, Fred Moore, Dean Nelsen, Jim Odo, Richard Sullivan)
- Deficiency of Construction Documents (Dan Arana, Gil Hoopii, Chuck Shriever, E. Alan Holl)
- Acceptable Quality (Walt Bell, Fred Moore, Richard Vieira, Stanford Knowles)
- Architect/Contractor Problems (Dan Arana, Gil Hoopii, E. Alan Holl, Alan Lock)

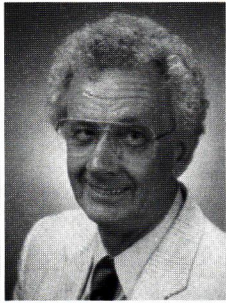
Bucks for Bricks

The American Institute of Architects and the Brick Institute of America have announced the 1995 Brick in Architecture Awards Program, which recognizes outstanding architectural achievement in brick design.

Eligible entries include works completed since Jan. 1, 1989, where 75 percent of new construction was completed in brick. Entries will be reviewed for creative use of brick in structural and architectural design and technical use of brick in meeting structural, aesthetic and/or architectural design challenges.

All entries will be considered for the new \$5,000 Charles Bulfinch Award, the highest accolade for brick architectural design. Bulfinch (1763-1844), considered the United States' first native-born professional architect, used brick almost exclusively in designing many American landmarks including the U.S. Capitol in Washington, D.C.

Entry forms must be postmarked by Jan. 16 and submission binders must be postmarked by Feb. 20. Information can be obtained by calling (202) 626-7586 or (703) 620-0010.



Ronald York

BIA Officers Installed

Ronald York, president of Skylights Hawaii, Inc., is the Building Industry Association of Hawaii's 1995 president. He succeeds Norman

Sakamoto, president of SC Pacific Corp.

Other officers are president-elect, Gerald Onaga, G.S. Onaga General Contractor president; vice president, Edmund Aczon, Aczon Construction Ltd. president; secretary, James Zweedyk, TKC, Inc. president; treasurer, Patrick Yamada, Bank of Hawaii vice president. The officers were installed by Tommy Thompson, the National Association of Home Builders president, at the BIA's 40th anniversary banquet held in early December at the Sheraton Waikiki.

All officers are also members of the BIA Executive Committee and Board of Directors. The Executive Committee includes: Norman Sakamoto; Danny Graham, Graham Builders, Inc. president; and Eric Wong, One Stop Door Shop Hawaii vice president.

Directors are Jeff Brown, Gentry Homes, Ltd. vice president/construction; Albert Chee, Jr., Horita Development, Inc. senior project manager; Earl Eldridge, Raynor Pacific Overhead Doors Ltd. president; Charles Heitzman, Watt Hawaii, Inc. president; Merle Higa, Robert M. Kaya Builders, Inc. treasurer; Bobbie Kane, Kane International Corporation president; Ruth Marsh, American Standard Plumbing Products Hawaii manager; Dale Nishikawa, Marcus & Associates, Inc. president; Herman Sakata, Capital Home Improvement Corporation president; Alan Shintani, Alan Shintani, Inc. president; Al Yamamoto, Bank of Hawaii senior vice president; and Ken Yokoyama, National Laminates, Inc. sales manager.

Hawaii Summer Preservation Field School

"Documentation and Preservation of Vernacular Architecture" is the subject of the 5th Annual Pacific Preservation Field School which is scheduled for June 5-30. The event, sponsored by the Historic Preservation Program, University of Hawaii at Manoa, will be held on Maui.

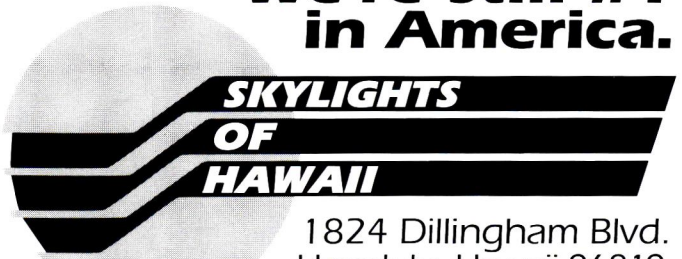
Training is provided in documentation and recording techniques, drafting and measured drawing, 35 mm and large format photography, historic building materials and conservation, as well as

preservation strategies and techniques. Lectures and study tours complement the hands-on field work. Tuition is \$581 for Hawaii residents or \$911 for nonresidents, plus an institute fee of \$680. Air transportation and accommodations are additional. The application deadline is April 1.

For information contact the Historic Preservation Program by mail: Department of American Studies; University of Hawaii at Manoa; 1890 East West Road, Moore 324; Honolulu, HI 96822-2318; by telephone: 1-800-993-7737 or (808) 956-9546; by fax: (808) 956-4733.

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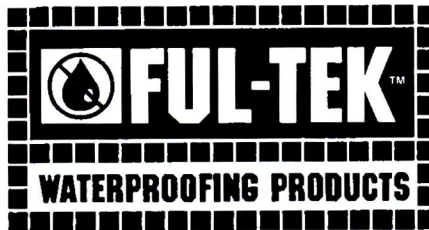
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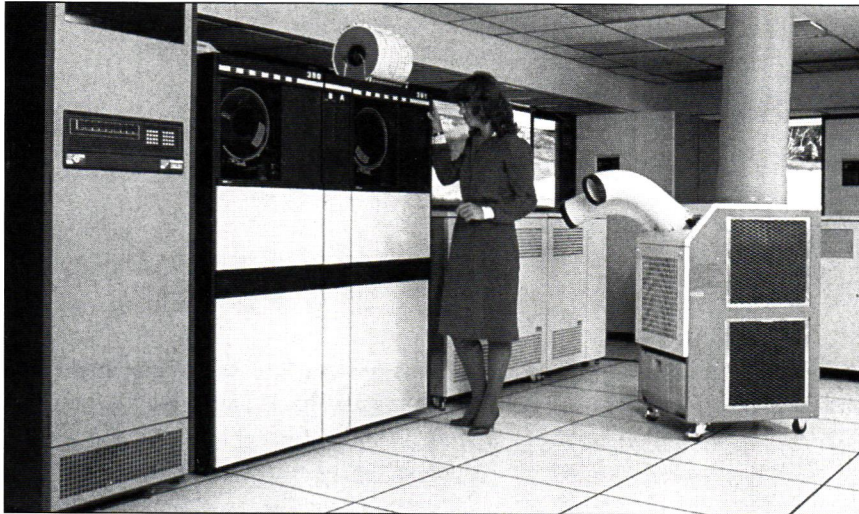
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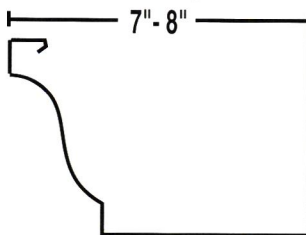
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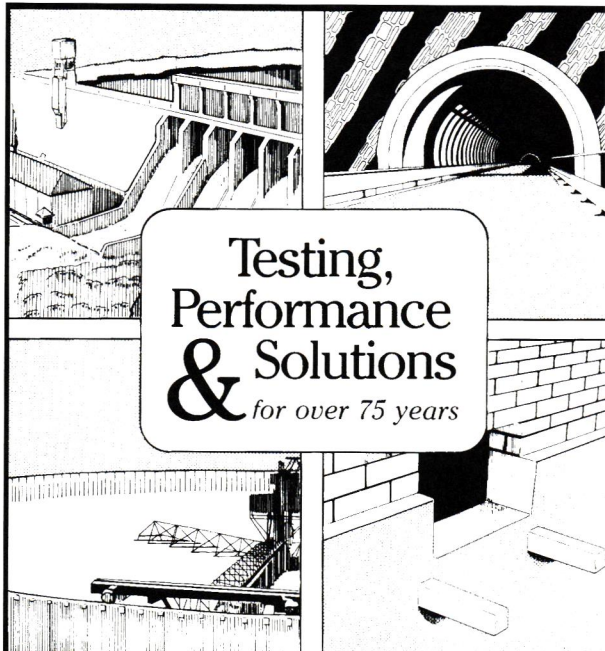
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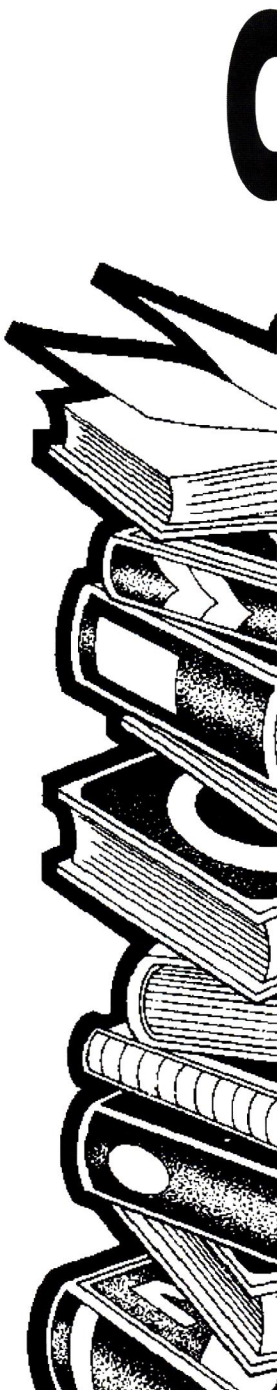
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Relief from unlimited liability

Hawaii's Builder's Statute

by Brad Petrus



Chong, Sato and Jones, AIA, a long-time kamaaina design firm, is served with a complaint. The complaint alleges that residents of a Waikiki condominium have suffered property damages due to water infiltration through the joints of a glass curtain wall. The complaint further alleges that design errors caused or contributed to the condition resulting in the damage.

The firm's computer listing of completed projects, which for insurance purposes includes all projects worked on for the last 10 years, is reviewed. The condominium project identified in the complaint is not on the list. As part of the firm's document retention policy, the firm retains project files for seven years, after which they are destroyed. A thorough search of the file room and off-site storage do not turn up any records. A cursory drive-by the building shows it to be ill-maintained and in a general state of disrepair.

Chong who is now semiretired, recalls that his former partner, now deceased, performed the design and contract administration for the construction of a mid-rise building with a name similar to that identified in the complaint more than 14 years ago. He is fairly confident that substantial completion was at least 12 years ago, a fact easily verifiable. He knows that both the developer and the general

contractor have long since gone out of business.

Chong also has a vague recollection of discussions with his former partner about the developer, upon the recommendation of the contractor as part of the value engineering, substituting a less expensive caulking material for that originally specified. While he cannot swear to it, Chong is fairly confident that the substitution was well-documented at the time. He knows, however, that his testimony would be inadmissible in court.

Should design firms be forced to defend lawsuits under such a scenario? If so, how does it effect insurance premiums? Will it force the prudent designer to engage in overly conservative design and specification? More fundamentally, is it fair? Does the threat of litigation for long-completed projects ever sleep?

In the 1960s, intense nationwide lobbying by the design and construction industry prompted many state legislatures to enact statutes of limitations and/or repose specifically applicable to lawsuits alleging errors or omissions by design professionals and contractors.¹ The apparent purpose of these statutory schemes was to protect the building industry from liability in perpetuity for alleged defects or deficiencies in the design and/or construction of improvements to real property and for consequential injury and damage resulting therefrom.

By 1982, 45 states and the District of Columbia had enacted what became commonly referred to as "builder's statutes." Most jurisdictions patterned their builder's statutes after

¹ Chapter 657 of the Hawaii Revised Statutes contains the limitation periods applicable to the majority of civil lawsuits. For example, Section 657-1 set forth a six-year statute of limitations applicable to actions based upon an alleged breach of contract and Section 657-13 contains a two-year statute of limitations applicable to general tort actions. To the extent that a design professional is sued for damages in an action which does not allege injury or damage due to purported negligence in planning, design, contract administration or construction supervision, reference should be made to the appropriate statute of limitations.

the Model Act drafted and promulgated by the American Institute of Architects, the National Society of Professional Engineers and the Associated General Contractors of America.

In 1967, the Hawaii Legislature enacted its version of the builder's statute following lobbying by the local chapters of AIA, NSPE and AGCA. Hawaii's builder's statute is codified at Section 657-8 of the Hawaii Revised Statutes.

The legislative history of the initial version of Section 657-8 suggests that the legislature's principal concern was the unfair burden of unlimited future liability exposure for the life of real property improvements. The inability with time to distinguish between errors and omissions in the original design and/or construction of the improvement and those deficiencies which were the result of negligent maintenance or normal wear and tear were of particular concern to the legislature.

A review of the legislative history behind subsequent amendments to Section 657-8 illustrates that the legislature became even more concerned with the potential costs of construction in the absence of limits to the age of improvements beyond which those involved in design and construction would be forced to defend lawsuits. With the expressed goal of "keeping housing costs within the reach of the greatest number of Hawaii's residents," the legislature reasoned that:

If no specific maximum statute of limitations is available, designers and builders must design and specify materials that will reduce their exposure to liability on the premise that even without extensive maintenance the structural integrity of the building will be maintained. If buildings must be designed with unlimited exposure in mind, the cost of construction will rise which translates into higher housing costs.

Section 657-8, in its current form, provides what is referred to as a bifurcated system of protection. Section 657-8 contains a two-year statute of limitations and a 10-year statute of repose. Under the two-year statute of limitations, a party must bring an action within two years from the time the party knew or should have discovered through reasonable diligence that an actionable wrong had been committed.

The 10-year statute of repose requires that an action be commenced within 10 years

following substantial completions irrespective of the time when the alleged injury or damage was sustained or discovered. Section 657-8 expressly provides that the filing of an affidavit of publication and notice of completion with the circuit court where the property to which the improvement was made shall establish the designer's and builder's proof of the date on which substantial completion occurred.

The 10-year statute of repose is the most powerful of the "immunities" provided by Section 657-8. It represents an absolute bar to liability based upon an objectively determined point in time; and, therefore, unlike the two-year statute of limitations, is not subject to the vagaries of someone's recollection of when certain conditions were first discovered.

Over the years, Hawaii's builder's statute, specifically the repose component, has been the subject of no less than two constitutional challenges before the Hawaii Supreme Court. This has resulted in the invalidation of the statute, in part or in whole, on equal protection grounds and five substantive legislative amendments.

The most recent amendment occurred during the 1994 legislative session due, in part, to the efforts of the Hawaii State Council of the AIA, Consulting Engineers Council of Hawaii and the Construction Industry Legislative Organization. The 1994 amendments to Section 657-8 took effect June 1, 1994.

As currently constructed, Section 657-8 applies to persons or entities involved in the planning, design, construction, supervision and administration of construction and the observation of construction improvements to real property. Improvements are defined to include, among other things, buildings and other structures, demolition, grading, paving and landscaping.

Section 657-8 covers actions the purpose of which are to recover damages for bodily injury, including death, and for damage to real and personal property. The inclusion of claims for damages for bodily injury and death was the product of the 1994 amendments.

Expressly excluded from the protection of Section 657-8 are



owners or other persons having an interest in the improvement or the property on which the improvement is situated, based upon their negligence in the repair or maintenance of the improvement and surveyors for their errors in boundary surveys.

It is likely that there will be future constitutional challenges to Section 657-8. The probable outcome of such challenges is hard to predict. The builder's statutes of 32 states have withstood the scrutiny of constitutional challenges. However, some of the states whose statutes have been held to be constitutional had enacted versions of the builder's statutes which were similar to prior versions of Hawaii's statute which have been declared unconstitutional. However, for the time being, there is some comfort in knowing that there is a statutory immunity with respect to projects completed more than 10 years before the initiation of litigation.

♦♦ Brad Petrus is a partner in the law firm Tom & Petrus. He is also an engineer.

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Professionals shift to alternative dispute resolution techniques

Mediation as an Affirmative Business Strategy

by Richard J. Rosenthal, CRE

Alternative dispute resolution techniques have long been a recognized method of controlling litigation costs and resolving business disputes in certain industries. Today, however, spiraling legal fees and the overwhelming congestion in the civil courts have forced a serious evaluation of conflict management throughout the fabric of American businesses.

Business entities of all types and sizes are experiencing a major shift to ADR techniques for their initial attempt at conflict resolution with clients, employees and other businesses. Some industries are experiencing this change due to the advent of court-annexed programs in which the judge has an option of ordering their disputes to prelitigation ADR.

A few businesses are experiencing this change as a result of newly imposed statutory requirements for prelitigation ADR in their industries. A number of companies are electing to follow Justice Sandra Day O'Connor's admonition that "the courts should be the last resort for the resolution of disputes, not the first." Business professionals are realizing that often more is at stake than the mere resolution of the dispute at hand—reputations, confidentiality and ongoing relationships to mention a few.

It is particularly within this last group of businesses that mediation has found such unwavering support. When it becomes clear that interest-based mediation and its consensual process variations can deal with issues that are beyond the ability of the judicial system to address, these businesses adopt mediation as an affirmative business strategy.

Mediation—the process of choice

ADR techniques are divided into two classifications: adjudicatory and consensual. The adjudicatory processes look back to the time of the dispute. These processes deal with what happened; what the consequences of the parties' actions appeared to be; what the law was at the time; and what conclusion is indicated by past reasoned decisions.

Consensual processes, on the other hand, look to the future to see what the parties can agree to do to put the dispute behind them.

Arbitration and litigation are both adjudicatory processes in which a third party is given the authority to decide the outcome of the dispute.

Mediation is a consensual process in which the parties, with the assistance of a neutral mediator, attempt to resolve their disputes without focusing on what is fair or who is right and who is wrong based on factual information—both legal concepts. Instead, the parties focus on what they are willing to do to put the dispute behind them.

In the mediation conference, the parties tend to concentrate on their highest priorities and move toward compromise on issues that are of a lower priority. The mediator's role is to create and maintain an atmosphere of open communication while facilitating negotiations.

Mediation is generally quicker, easier, simpler, more economical than litigation or arbitration and is confidential. It is also a process in which control of the outcome is retained by the parties. The mediator does not have the authority to make an award; impose a resolution of the dispute; or even require the parties to continue mediating if they do not wish to do so.

Mediator technique

Mediation is a very stylistic profession. It allows, and virtually demands, that mediators develop an approach to the process that fits their personalities, background, subject matter knowledge and the needs of their clients.

There is a broad spectrum in the way mediators apply their concept of facilitated negotiation. Should they form opinions on the issues at hand? Should they address only those problems that are initially identified by the parties to the dispute? The clearest, most incisive articulation of the scope of mediation styles available are presented by Leonard L. Riskin, director of The Center for Dispute Resolution at the University of Missouri—Columbia. He proposed a system for classifying the stylistic approaches possible for a mediator.

Riskin says, "the evaluative mediator assumes that the participants want and need the mediator to provide some direction as to the appropriate grounds for settlement. These guidelines could be based on law, industry practice or technology."

He also says, "The facilitative mediator assumes the parties are intelligent, able to work with their counterparts and capable of understanding their situations better than

either their lawyers or the mediator. So the parties may develop better solutions than any the mediator might create."

An understanding of a mediator's potential orientation and style will allow the firm utilizing mediation as an affirmative business strategy to select the approach that is designed to produce the most desirable results for the firms' strategy.

Mediation as an affirmative business strategy

Real estate and its allied industries are a perfect example of fields in which the firms, large and small, confront conflict in the normal course of business. Real estate brokerage firms know that a percentage of their transactions are guaranteed to result in buyer-seller or broker-principal disputes.

Builders/Developers know that for every tract of homes sold, a percentage will result in builder-buyer disputes. Often the disputes are warranty problems, which generally occur after the transfer of title.

Each of these industry groups manifests its dispute risks in different ways.

The broker, in dealing with his need for the type of reputation in the market that encourages new clients to seek out his services, has

to deal with the findings of a survey done by the National Association of Realtors® some years ago. NAR reported that each unhappy customer in a real estate transaction told an average of 20 friends and acquaintances about the bad experience. On the other hand, a happy customer did not tell anyone of a successful transaction unless specifically asked.

A builder, with buyer warranty demands, is faced with a different scenario. If he agrees to accept responsibility for every real or imaginary warranty problem claimed by an unhappy buyer, not only will his profit be

The chart below demonstrates Riskin's approach to evaluation of the range of mediation styles.

MEDIATOR TECHNIQUES

The following grid shows the principal techniques associated with each mediator orientation, arranged vertically with the most evaluative at the top and the most facilitative at the bottom. The horizontal axis shows the scope of problems to be addressed, from the narrowest issues to the broadest interests.

EVALUATIVE

Urges/pushes parties to accept narrow (position-based) settlement

Develops and proposes narrow (position-based) settlement

Predicts court outcomes

Assesses strengths and weaknesses of legal claims

Urges/pushes parties to accept broad (interest-based) settlement

Develops and proposes broad (interest-based) settlement

Predicts impact (on interests) of not settling

Probes parties' interests

NARROW

Litigation
Issues

Other
Distributive
Issues

Business
(Substantive)
Issues

Business
Interests

Personal
Interests

Societal
Interests

BROAD

Helps parties evaluate proposals

Helps parties develop narrow (position-based) proposals

Asks parties about consequences of not settling

Asks about likely court outcome

Asks about strengths and weaknesses of legal claims

Helps parties evaluate proposals

Helps parties develop broad (interest-based) proposals

Helps parties develop opinions

Helps parties understand issues and interests

Focuses discussion on underlying interests (business, personal, societal)

FACILITATIVE

©1994 Leonard L. Riskin

seriously impacted, his behavior will add to the problem.

On the other hand, if a builder tells everyone with a claim to get lost, his litigation costs will negatively impact his profitability. He will also develop a reputation in the marketplace that will probably discourage buyers, especially first-time buyers, from seriously considering his product.

Each of these related fields has its own scenario of client conflict. This conflict typically results in similar business risks and the desire to achieve some or all of the following benefits:

- Speed and economy of dispute resolution
- Confidentiality of result, control of the process and the outcome
- Maintenance of a good reputation and good client relationships

Peter Robinson, associate director of the Institute for Dispute Resolution at Pepperdine Law School in California says, "These goals are more likely to be achieved in a

consensual setting (mediation) than in an adjudicatory process (arbitration or litigation). Adopting mediation as an affirmative business strategy simply tells one's clients, vendors and associates that you value the working relationship and will create mechanisms to address the usual array of conflicts in a reasonable manner."

The final analysis

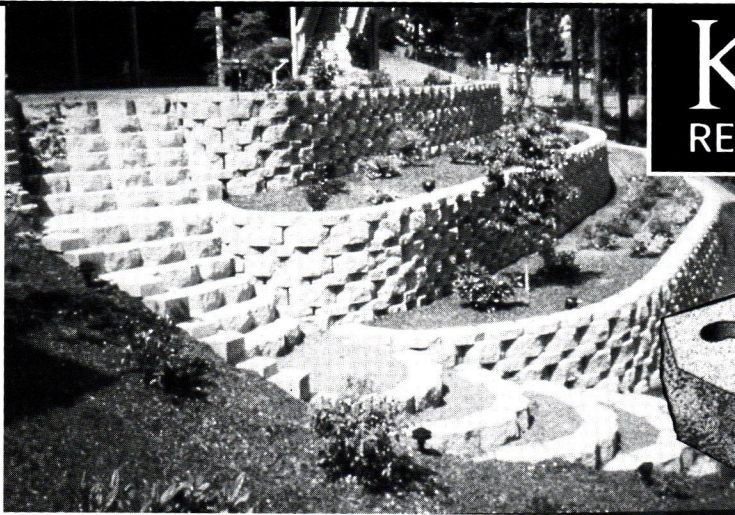
To initiate protections against congested court dockets and spiraling costs for both parties and the state, ADR can be mandated by judicial fiat, legislative (statutory) intervention or the insertion of a contractual provision in the documents governing the relationship. These activities are all in existence and their use will undoubtedly continue to expand.

However, wouldn't it be better for professionals to initiate a conflict management strategy that would allow them to say to their clients, vendors and associates, "We care

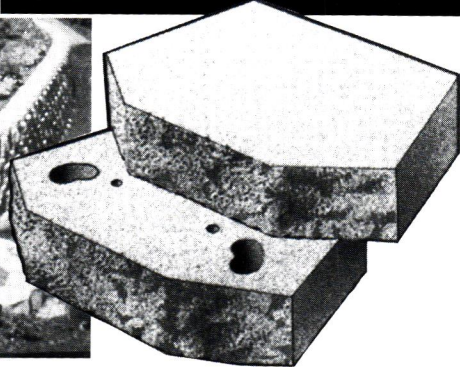
about our relationship and would like to attempt to resolve our dispute in a reasonable manner. As a matter of policy we have arranged for the services of a firm of professional mediators. You can select any available individual from their panel so that we can attempt to put this dispute behind us, with the assistance of a trained third-party neutral. You are not committing to anything except sitting down at the table to talk."

It appears that this is the wave of the future for American businesses. A firm can unilaterally create its positive image in the market place and achieve both short-term and long-term benefits in its business relationships simultaneously through the adoption of mediation as an affirmative business strategy.

♦ Richard J. Rosenthal, a counselor of real estate, is founder and chief executive officer of The Rosenthal Group of Venice, Calif. TRG is a litigation consulting firm that specializes in real estate industry issues.



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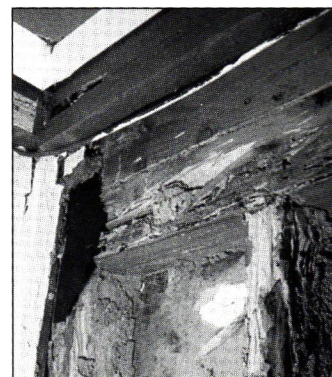
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A new level of intensity encountered

Hawaii Experiences A Termite Epidemic

by Jim Reinhardt, AIA; Elmer E. Botsai, FAIA, and Julian Yates, Ph.D.



**A structural beam
damaged by termites.**

Hawaii is experiencing an epidemic of termite activity which surpasses anything that has been experienced in the past. It has long been acknowledged that, because of the Formosan subterranean termite (*Coptotermes formosanus* Shiraki), Hawaii has had the worst termite problems in the United States. This new level of intensity, coupled with today's construction conditions, is causing problems not previously encountered.

There appears to be three main reasons for the emergence of the problem at this new intensity: the relative ineffectiveness of the new soil termiticides; an increased amount of double-wall wood frame construction, particularly on slab-on-grade foundation; and failure to modify construction detailing and practices to reflect the new conditions.

Those pest control operators, architects, engineers and contractors who are highly involved with termite repairs are seeing houses infested within one year of completion

and 5-year-old houses devastated by termites. There are houses where pest control operators have treated, re-treated and re-treated but the termites still return.

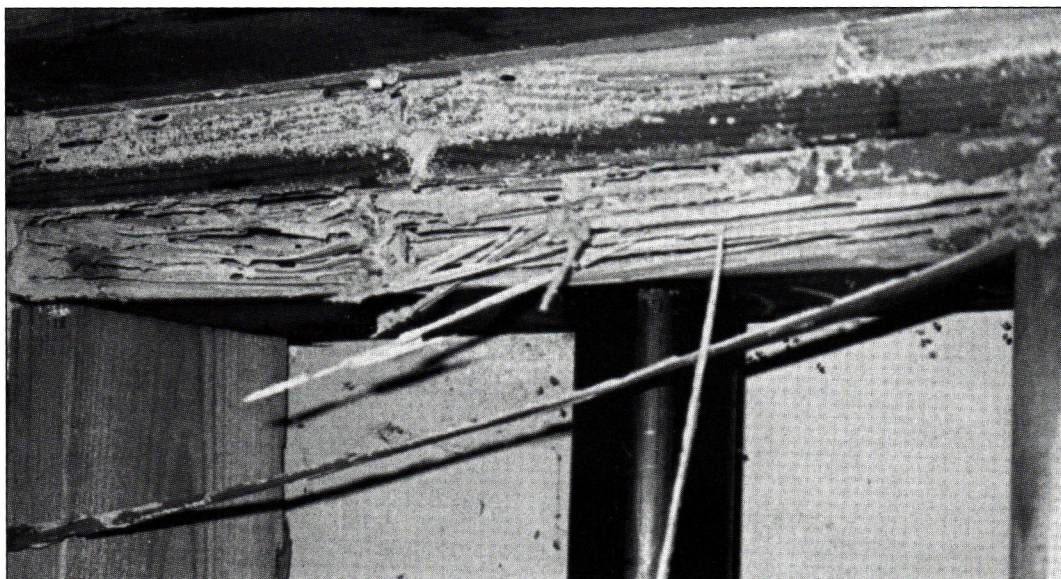
The lower floor structure of one house was completely destroyed by termites, even though it was constructed with pressure treated lumber (to the Hawaii-use only standard).

Another house, a 4-year-old residence on Hawaii Loa Ridge which sold for more than a million dollars, was damaged so extensively that the owners have decided to tear it down rather than repair it. Yet another house on the same ridge, this one less than 2 years old, is facing repair costs of \$250,000. The really frightening aspect of these problems is that they are not uncommon!

Needless to say, everyone involved with the houses is getting sued...the sellers, contractors, architects, real estate agents, pest control operators, wood treating companies, lumber suppliers...everyone.

One of the conclusions that several professionals have come to is that "What we all used to do," no longer works. It is the professionals' opinions that the most significant change that has occurred has been the banning of chlordane, previously the most widely used soil termiticide. Chlordane was very long-lasting (that was, in fact, a major reason for its being banned), had a very high kill rate, and was rela-

**A termite-
damaged top
plate.**

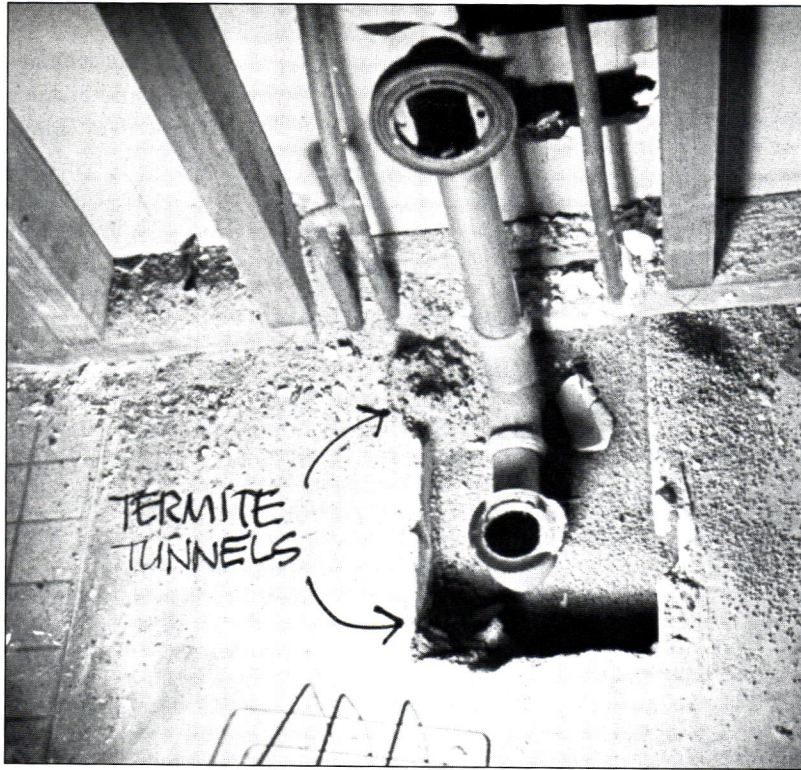


tively unaffected by soil moisture. Treating the soil under and around a house with chlordane created a barrier that was largely "termite proof," unless a major mistake was made which allowed alternate paths for termites to the structure.

This high degree of effectiveness allowed some "sloppiness" in other aspects of the termite control measures. The new chemicals which have replaced chlordane do not last nearly as long and may in fact be subject to breakdown even earlier than anticipated because of the high alkalinity common in Hawaii's soil. In addition, because of high moisture in the soil, either from rainfall or sprinklers, the chemicals tend to leach out of the soil.

Recently soil samples from beneath two slabs were analyzed for termiticide residue. One project was about 2 years old, the other 3 years old; different termiticide were used on each. In both cases, no termiticide residue was found in either of the sample sets tested. It's not surprising that the termites were able to get to the structures.

What steps should the designer of a wood frame structure take to minimize the risk of termite infestation? A well-conceived termite protection plan should include four levels of protection. The first is to create a barrier in the soil under and around the structure to keep termites away from the building. This must be done before the slab is poured either by pre-treating the soil with termiticides or by installing basaltic termite barrier beneath the slab.



A blackout for a bathtub drain; a major termite entry pathway.

Since the longevity of the termiticides now available is limited, a question arises: Is it worth putting termiticide under the slab if the chemical can't be renewed when it deteriorates? Re-treatment can be done by drilling and injecting, but the effectiveness is not equal to the original treatment.

A growing number of construction industry professionals involved with termite repair are questioning the value of soil termiticide under slabs-on-grade, but the Honolulu building code



The drain end of a bathtub with the Gypsum-board removed.



A mud tunnel on the side of a foundation wall. To anyone involved with termites, this is a major cause for concern.

still requires soil treatment when wood treated to the Hawaii-use-only standard is used. While BTB is an excellent product in concept, it is very difficult to place properly.

The second level of protection is to keep the termites which get past the first level away from the wood portions of the structure. With slabs-on-grade foundation, this means eliminating all openings in the slabs. Open areas are commonly seen (termite pathways) at bathtub and shower drain blackouts; slab penetrations by pipes and electrical cables where PVC sleeves are routinely used around pipes and electrical cables and where insulation is installed around pipes; and slab joints and cracks.

Cracks can be minimized through proper subgrade preparation; proper placement of the reinforcing; and proper specification of the water/cement ratio. Bathtub and shower blockouts can be filled with epoxy grout and BTB. The PVC sleeves at slab penetrations can simply be eliminated.

TermiMesh, a material new to Hawaii may be extremely useful in conjunction with slabs-on-grade construction. It is a proprietary stainless steel screen with openings too small for termites to pass through. It works well in Australia and New Zealand. Tests will be conducted on this product in the near future

in Hawaii.

For raised floor construction with continuous perimeter foundations, termites can best be kept away from the wood structure by using well-reinforced poured-in-place concrete foundation walls rather than CMU. In addition, because of the ability to re-treat when needed, soil termiticides can appropriately be used under raised floors. Retaining walls supporting wood-framed walls should be poured-in-place concrete.

For post and pier foundations, the key is to provide good separation between the soil and the bottom of the posts. Post support brackets which provide clearance between the top of the footing and the bottom of the posts are also helpful.

The third level of protection is to deny food to the termites if they get past the first two levels of protection. This can be done by using steel framing and structure, CMU structure or effectively pressure treating wood framing. If treated wood is to be used, it's important to select treatment that will really work. Chemonite (ACZA or ammoniacal copper zinc arsenate) works well. It has a very high kill rate, good penetration and is permanent, but it requires incising and is "kind of ugly."

Wolman or Osmose salts (CCA or chromated copper arsenate) has a fair kill rate. It is permanent and works well with plywood, but doesn't penetrate Douglas Fir or Hemlock structural lumber very well, particularly if incising is not used. Hibor (Borate) has a lower kill rate than ACZA but the penetration is excellent. However, it cannot be used in conditions exposed to moisture, although normal exposure to weather during construction will not present a problem.

Tribucide is mainly used in interior condition where its clear color is used with natural wood finishes. With all wood treatments, adequate penetration and retention of the treating chemicals is critical. It is now well accepted that wood treated to the Hawaii-use-only standard is not nearly as well protected as that treated to the AWP C-2 standard (the old LP-2/LP-22).

The final level of protection is to force any termites that make their way past the first three levels out into the open where their mud-tunnels can be seen during routine inspections.

This involves creating barriers that will block their movement and eliminating obstacles that will limit inspection. Properly detailed

termite shields can do this, but the detailing is very tricky.

One of the simplest steps is to keep planting away from the foundations so that the edge of the concrete foundation is visible. Expansion, control and cold joints should be placed where they can be seen and inspected, not under partitions or concealed inside cabinets. Inspection panels should be provided so that bathtub blockouts can be inspected.

Each of these general suggestions can be expanded in detail and should be understood by the architect planning the project. Each of these conditions presents potential problems and risks. How should the BTB barrier be detailed? What are the most effective soil termiticides? What is the appropriate application concentration? What is the best way to detail below-grade retaining walls?

Other questions to consider include: How can expansion, control and cold joints be detailed and located to minimize the potential for termite intrusion? How can existing conditions be most effectively treated? What wood preservative treatments are best for particular conditions? What's the status of TermiMesh and how is it used? What about "baits?"

In response to a workshop initiated by Steve Holmes, city councilman, a committee has been established to work with the Building Department to explore, investigate and recommend changes to the Honolulu Building Code to improve the standards for termite protection of wood frame structures. The committee is comprised of a broad spectrum of the construction industry, including representatives from the wood treating companies, pest control operators, contractors, the University of Hawaii Department of Entomology and AIA.

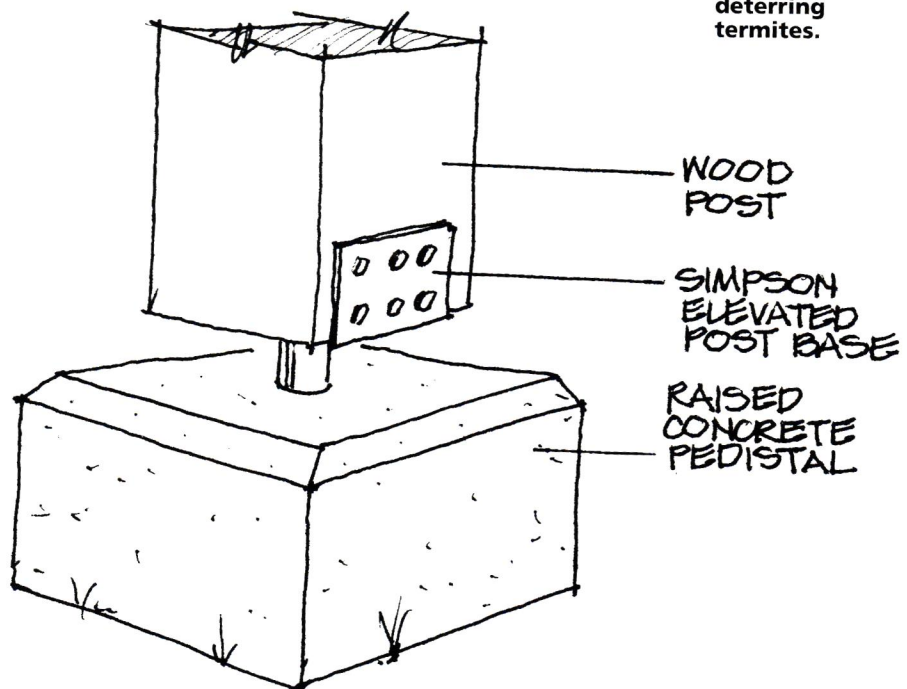
This article is an expression of the opinions of the authors based on their observations of termite problems in the field. The intent of this article is to identify areas where the authors have observed termite problems and to alert construction industry professionals of the potential dangers at those points.



Plumbing pipes with the plastic sleeves.

♦ Jim Reinhardt is president of Architectural Diagnostics, a firm that specializes in construction problems. Reinhardt is also an instructor for the Hawaii Pest Control Association's termite inspectors training class. Elmer E. Botsai is a professor and former dean of the University of Hawaii School of Architecture at Manoa. He devotes a significant amount of time to termite problems. Julian Yates, a professor in the UH Urban Entomology Department, specializes in termite problems. He is a member of the state Structural Pest Control Board.

Post support brackets which provide clearance between the top of the footing and the bottom of the post are also helpful in deterring termites.



A guaranteed policy for the design team

Project Professional Liability Insurance

by Mary Yoshimoto

The goal of every construction project is to complete the job on budget, on time and without hassles. Due to the complexity of construction, even the best planned project has uncertainties. Problems are inevitable, and problems can send any project spiraling into job delays, cost overruns and professional liability claims. Project professional liability insurance is a risk management approach to deal with these concerns. It deserves greater consideration and use.

Project insurance is a guaranteed policy for the design team, and is dedicated to a specific project. It contributes to a team environment that facilitates increased communication and coordination among the design team members. The potential for a claim-free project is increased.

Project insurance is a good risk management tool because it improves loss prevention. It is also a good business technique because it creates a project team that promotes a more profitable and satisfying outcome for all.

Project insurance is designed to meet the unique needs of each project. The design team

and owner determine the amount of coverage and duration of coverage. Premiums are affordable and guaranteed for the life of the project.

The cost of the project policy will usually range from .25 percent to 1 percent of the construction value. Premiums may increase or decrease if the construction value changes, but the rate (per thousand dollars of construction value) does not change.

The premium on a project policy is based on the characteristics of the project. Therefore, the premium is a more accurate reflection of a project's risk than the overall rate on a practice policy which is a composite of all of a design firm's projects.

Because it is the owner who receives the most benefit from the policy, the cost is usually borne by the owner as part of the construction budget. This is similar to the general contractor's insurance costs being passed on to the owner as part of the contractor's bid price.

The policy cannot be canceled by the insurance company except for nonpayment, a breach of the policy conditions or a misrepresentation on the application for coverage. The policy covers the project through substantial completion plus additional years for discovery of claims.

The maximum policy term is generally a total of 10 years—five years of construction plus five years of discovery. What happens at the end of the coverage period? Most insurance carriers will then include the project on the firm's regular practice policy to cover any future claims.

Because project insurance provides insurance protection exclusively for a specific project, the design team and the owner can be assured that the full protection of the policy will be dedicated solely to the project. Limits will not be eroded by claims on other projects

The design team for the inter-island terminal at Honolulu International Airport used project professional liability insurance.

Photo by Bill Hagstotz



which is the case with a design firm's standard practice policy.

Project insurance covers the design team not the owner or the general contractor. However, the benefit to the owner is that the project is covered in case of errors and omissions by the design team. It eliminates the owner's need to follow up each year on the renewal of each professional's insurance. It also eliminates the exposure to the owner and the design professionals for uninsured or underinsured design team members.

With project insurance, single point claim responsibility encourages the design team to work together to solve problems, not argue among themselves. Only one deductible per claim applies collectively to the design team.

This benefit requires up-front discussion and agreement as to how the deductible will be allocated. Agreement must be reached and memorialized in writing. This will help avoid disputes among design team members if a claim occurs and attention needs to be focused on dealing with the claim itself.

One method of allocation is pro rata based on the percent of fees received by each member. Premiums could also be allocated by the same method if the owner does not pay the premium or only pays a portion of it.

Project insurance reduces the cost and time necessary for legal maneuvering because one attorney represents the design team and the design team works together to solve a problem. The use of mediation or other dispute resolution techniques should be explored to resolve claims as expeditiously as possible.

The combined benefits of project insurance with the positive power of project partnering have a synergistic effect.

Partnering is a formalized delivery method that involves commitment, communication and timely conflict resolution among the parties of a construction project. Partnering

produces results because it builds good working relationships.

Partnered projects are less dispute-prone and more likely to be finished on time and within budget because all key participants are involved in the process and have the same goal.

Partnering is not just a buzzword or some trendy, unproven concept. It works. And it has been endorsed by many groups, including the AIA, ACEC and Associated General

Contractors of America. The combination of project professional liability insurance for the design team and project partnering creates a proactive program that resists litigation and encourages success.

♦♦ Mary Yoshimoto is an account executive with Finance Insurance of Honolulu. She specializes in professional liability insurance for architects and engineers. Yoshimoto is the exclusive representative for Design Professionals Insurance Company in the state of Hawaii.

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Observations from a plaintiff's attorney

Why Architects Get Sued

by Chad P. Love

Architects who want to avoid lawsuits should put aside the architectural magazines; step away from the drafting board; and begin honing their interpersonal skills. Futurists and psychologists have warned that the future of civilization will not depend upon science, physics or architecture but on the skill and maturity of interaction between human beings.

The field of architecture is so advanced that office buildings can be built a quarter of a mile high. However, in the field of dispute resolution, techniques used by building professionals are so backward and primitive that a group of adults cannot sit down and resolve their differences about leaking windows without years of (expensive) bickering before a judge. Their skills in erecting buildings may be in the 20th century but their dispute resolution skills are stuck in the Neanderthal age.

Two of the key factors that increase an architect's chance of getting sued are noncommunication and arrogance.

Noncommunication

One of the most common Neanderthal tactics used to try to avoid litigation is the "head in the sand" approach—i.e., the architect fails to write or call back the homeowner. An example of this is several low-income owners of a small condominium building who went to an attorney's office complaining of leaks. They were told litigation would be very expensive and were urged to "work it out" with the design professional.

A few weeks later they came back and pleaded with the attorney to take the case because the design professional just gave them the "brush off." Again, they were warned of the expense of litigation and told to talk to the

design professional. (The repairs they needed would cost less than \$10,000.) A month later, the owners returned, infuriated because the design professional would not talk with them.

The noncommunication and the injustice of the situation ignited the attorney's sympathies and he agreed to take the case on a contingency. The case went to trial and the jury returned a verdict for more than \$1 million.

Arrogance

Another common Neanderthal approach that increases the chance of suit is the architect who is indignant about anyone questioning his work. An illustration of this point is the architect who was asked to attend a condominium board of directors meeting and discuss the reasons for a certain problem in the condominium that he designed. The architect came to the board meeting and delivered his defense in a hostile "how dare you question my competence" attitude. The board had never intended to sue him. However, by the time he finished his tirade, several directors were almost ready to sue.

Every architect should remember that the decision by a board of directors, homeowner, or their attorneys to file a lawsuit is almost never a simple black-and-white decision. In most situations, the decision could go either way. The deciding factor may be the interaction between the architect and the homeowner. It is very hard for a homeowner to sue an architect who is responsive, fair and courteous. When an architect ignores condominium boards or homeowners, at least one of the homeowners will invariably say, "Let's sue him. He does not even have the courtesy to write us back."

Some ideas on how architects can reduce their chances of getting sued are as follows:

- **More communication**—If the homeowner or board writes to a design professional that person should write them back or better yet, meet with them personally. It is very hard for people to sue someone they know well and who is trying to help them. Although there is some risk in making statements that could be used later if there is a lawsuit, that risk is more than outweighed by the possible good effects.

- **Active listening**—Many homeowners will be satisfied, at least in part, if someone will just patiently and sympathetically listen to their “tale of woe.”

However, often the architect will not let the homeowner get more than two sentences out before the architect will explain why the homeowner is wrong, react emotionally or respond in some ego-based fashion. Everyone should take a course on the concept of “active listening.” It is a critical skill to develop.

- **Win/win paradigm shift**—Architects, like almost everyone, have been programmed, by school, sports, etc., to view their encounters with homeowners on a “win/lose” paradigm. That is, architects think that in order for them to get out of the situation in good shape, the homeowner has to “lose” in some way, e.g.—get nothing. A radical shift is necessary. The thinking should be as noted in “The Seven Habits of Highly Effective People,” by Stephen Covey, “How can I find a way that both the homeowner and I win?”

- **Pick a proactive attorney**—In situations where an attorney is needed, professionals should be cautious when selecting someone to represent them. Hire an attorney who will zealously and creatively work for a quick and economical solution.

- **Mediation**—If there is a dispute that cannot be resolved by using the other available approaches, “mediation” may be an option.

There is no “quick fix.” It will take years to really learn and implement some of these suggestions.

Design professionals should remember that in warding off a potential lawsuit, tact, concern and communication skills may be more important than architectural skills. The decision to file a lawsuit against an architect may, in large part, pivot on how the homeowner or the condo-

minium board has been treated by the architect.

♦ *Chad P. Love is an attorney with Love Yamamoto & Motooka. He represents homeowners associations as well as building industry professionals.*

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Building professionals work to find design solutions

Moisture Vapor Penetration

by Elmer E. Botsai, FAIA; Rick Beall, ME; Jim Reinhardt, AIA

While Hawaii's warm climate is considered ideal by most people, it is these same weather conditions that can create an atmosphere for bad indoor air quality. Moisture vapor, condensed by air conditioning, is becoming more of a concern in the building industry.

It seems the fundamental problem is a direct descendent of the energy crisis. Prior to the rush to save energy and make buildings tighter, air quality and moisture vapor penetration were rarely mentioned. Today, that is no longer true.

Bad indoor air quality is caused by mold and mildew growth which is a result of moisture vapor condensation inside buildings.

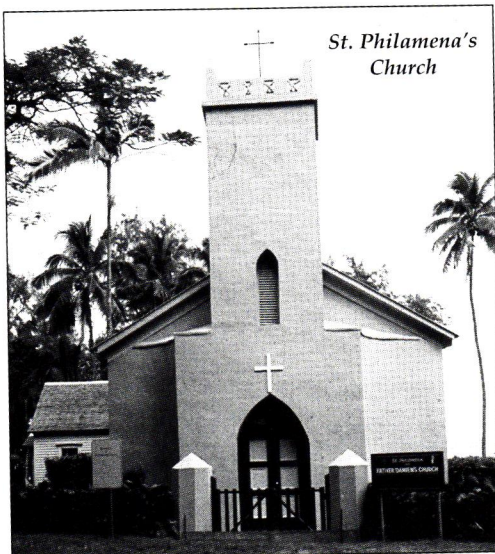
Moisture vapor is a normal component of air. However, problems occur when this vapor comes in contact with a cool surface. This combination produces free flowing water. An

example of this is the condensation which forms on the outside of a cold glass of liquid.

While most design professionals are not air quality scientists or experts in microbial contamination, they have been exposed to problems connected with indoor air quality. Architects and mechanical engineers should work together to insure reasonably moisture-free interior conditions that will prevent mold and mildew growth.

Preventing uncontrolled infiltration helps reduce the flow of moisture vapor into an air conditioned space. A building under a negative pressure in relation to the exterior will be at a greater risk of moisture vapor in the controlled space. The common method of attempting the control of diffusion is through the use of a vapor barrier.

Remember that an effective vapor barrier can also be an effective moisture collector. An example is what happens to penetrable walls



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with sheet vinyl on the interior when subject to cool room conditions. Water collects inside the walls.

Placement of the vapor barrier within any given assembly is critical to the success of the installation. Simply protecting the barrier through insulation is no assurance of a successful installation.

The typical procedures learned by most design professionals in school for insuring reasonably moisture-free interior conditions are no longer valid. For example, in a temperate climate heated building, it is quite proper, in fact prudent, to install a vapor barrier on the inside face of the studs. In Hawaii with an air conditioned building, this method is clearly not correct.

In cold or cool climates, the warm, moist air is inside the building trying to get out. In this scenario moisture is kept out of the stud cavity through vapor retarders which are properly installed on the inside face of studs.

In Hawaii, the situation is reversed. The warm, moist air is outside trying to get inside the structure. So in Hawaii, it makes more sense for the vapor barrier to be on the outside face of the studs and keep the moisture vapor out of the building completely.

The challenge is to keep the moisture vapor from entering the space where surfaces cooled by air conditioning can cause condensation. As a clear odorless gas, moisture vapor can travel as a component of air or it can travel against the flow of air by the process of diffusion. In essence, moisture vapor will always tend to travel from areas of high humidity to areas of low humidity.

There are two absolutes that design professionals should follow if they are to prevent moisture infiltration. The first is to provide a naturally ventilated building which allows a great deal of free flowing air so that interior conditions are as close to exterior conditions as possible. The second is to pay close attention to details. Points that may help reduce moisture penetration include:

- Sealing the building. The vapor barrier should be as close to the exterior skin of the warm side (in Hawaii the outside) as possible. This may be easier said than done in some buildings and will require innovative ideas.
- Paying close attention to windows and sliding doors. Try to get tight units.
- Paying close attention to slabs-

on-grade conditions. The ground is a source of moisture vapor. Maintain a continuous vapor barrier under the slab, particularly at construction joints.

- Trying to keep a slight positive pressure in the building. Above all, do not allow a negative pressure to exist.
- Not relying on infiltrated air to provide make-up air for the build-



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ing. Require all make-up air to be mechanically provided and try to dehumidify it before it enters the conditioned space.

- Avoiding energy saving strategies which reduce dehumidification, i.e. using warmer chiller water, shutting off re-heat coils, etc.

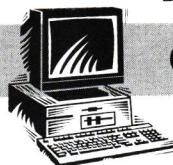
- Watching out for interior partitions wrapped in vapor barrier coverings. This can be very critical when a mechanical supply register blasts such a partition with cold air. Remember, at elevated humidity conditions, a small temperature change will create condensation.

♦♦ Elmer E. Botsai specializes in water infiltration and other building diagnostic work. Rick Beall is the president of Beall and Associates, a mechanical engineering firm that provides air conditioning, ventilation and other design services. Jim Reinhardt specializes in building diagnostics.

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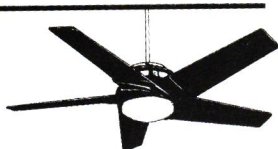
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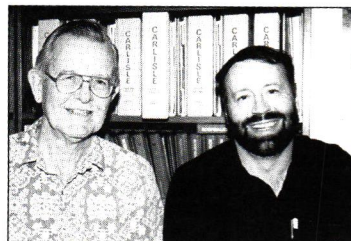
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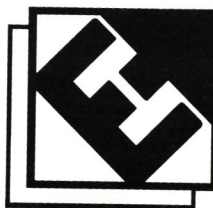
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Renovation and Additions

Kajioka Okada Yamachi Architects

First Hawaiian Bank, Kailua-Kona Branch

The First Hawaiian Bank, Kailua-Kona branch was originally built in 1969. The building was characterized by the use of dark-stained natural woods and exposed aggregate concrete, using volcanic aggregate from the Big Island. The building, the first in the area, has remained a landmark for Kailua-Kona, despite being surrounded by newer commercial developments.

To keep pace with the growth of the area, First Hawaiian Bank decided to expand and refurbish the Kailua-Kona branch. The firm Kajioka Okada Yamachi Architects was given the task of expanding the facility from 6,400 square feet to 9,000 square feet.

The goal of the project was to renovate the structure while maintaining a balance between preserving a well-liked and recognized presence in the area with the need to expand and freshen the facility to service an expanding community. To achieve this goal, the design team used familiar natural materials such as local rock, stained wood, koa and earth tone tiles.

The entries were reworked with a focus on organizing the functional adjacencies of the various departments to create a cohesive flow between the new and existing areas.

The flooring pattern leads the customer through the lobby and teller lines. Custom design accent tiles, created with a stenciled silk screening process, incorporate a



Photos by David Franzen

The First Hawaiian Bank, Kailua-Kona branch was expanded and refurbished to keep pace with the area's growth.

traditional pineapple motif for color and local flare. Carpets in various tropical patterns maintain an understated corporate image.

Borders of white soffit at the lower ceiling provide a crisp contrast to the featured open-beam ceiling of the lobby. A whitewashed redwood plank ceiling with white accented beams highlights the previously dark vaulted ceiling. Rich koa trims accent the perimeter soffit, tying the ceiling into other architectural elements.

Off-white wall covering and koa trims have been used as a complementary backdrop to the First Hawaiian Bank's fine art collection.

Functional and cost effective surface materials (plastic laminates) were selected for the tellers' countertops. Koa

accents were incorporated in the trims, risers and handrails where they could be appreciated both visually and by physical contact.

One of the foremost design criteria was to showcase First Hawaiian Bank's collection of commissioned art treasures by local artists. Through collaboration with Yvonne Cheng, an art consultant, First Hawaiian Bank's various art pieces were placed to provide beautiful accents in the public and office spaces.

The featured piece in the grand lobby is a 7-by-57 foot mural of 15 canvases, created by big island artist Hiroki Morinoue. The piece symbolizes the changing patterns of land, sky and ocean on the Island of Hawaii.

Jury's Comments

A successful remodeling and extension which creates a fresh spatial interior in color and detailing.



Carpets in various tropical patterns maintain an understated corporate image throughout the building.

Credits

Owner/Client

First Hawaiian Bank, Kailua-Kona Branch

Architect

Kajioka Okada Yamachi Architects

Structural Engineers

J. Brian Hughes & Associates

Mechanical Engineers

Randolph Murayama & Associates

Electrical Engineers

Nakamura Oyama & Associates

Landscape Architect

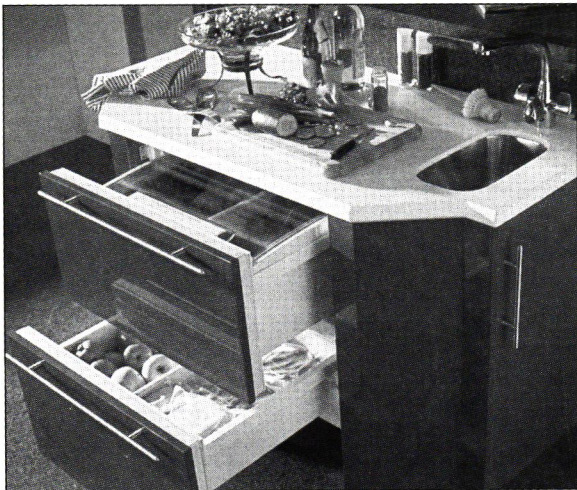
Randall Fujimoto

Contractor

Constructors Hawaii



Exposed volcanic aggregate adds an authentic island touch to the decor of the bank offices.



With Sub-Zero's Integrated 700 Series, fruits and vegetables are conveniently located at the kitchen island.

New Products

Innovative systems approach unveiled **Sub-Zero's Total Home Refrigeration**

Sub-Zero Freezer Company, the industry leader in luxury built-ins, recently unveiled its latest innovation, the Integrated 700 Series, a system of cabinets and drawers that offers refrigeration for virtually any room of the house. From the kitchen, to the den, to the master bedroom suite, the 700 Series creates a new era of functional design freedom in refrigeration.

Sub-Zero's new product line consists of two basic forms—a tall unit and a base unit. Each is a space-saving 27 inches wide, significantly slimmer than standard appliances. This design eliminates the problem of "fitting" or "working in" an oversized refrigerator into room layouts.

The units are available as all-refrigerator, all-freezer or a combination of the two. Consumers can mix-or-match the series by using the tall and base units, or the handy base drawers only.

"The 700 Series is the answer to homeowners' and designers' search for complete design freedom and convenience in refrigeration. Now, consumers don't need to walk across the kitchen to get another onion when chopping at the island," said James Bakke, president and CEO of Sub-Zero Freezer Company. "With our 700 Series base units, food is literally only an arm's reach away."

Aesthetic integration

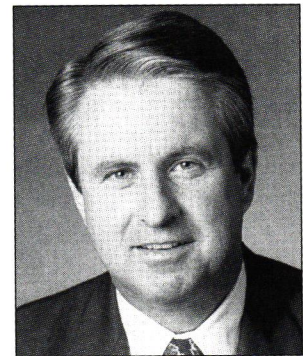
Whether the room is contemporary, traditional or Old World...light, medium or dark toned, the 700 Series fits into any decorating scheme. The product is compatible with standard kitchen cabinet dimensions, allowing all types of paneling and handles to be mounted onto the units. Any trace of refrigeration disappears once the cabinet door or drawer is closed because of a new concealed hinge.

Placement flexibility

For maximum convenience, the 700 Series units can be located anywhere in the home. The kitchen can run more efficiently and smoothly by placing a refrigerator or freezer near work areas. Congestion is reduced with Sub-Zeros spread throughout the kitchen. A tall unit near the breakfast nook stores milk, juice, fruit and bread.

Beyond the kitchen, the 700 Series complements various room activities. When entertaining in the den, appetizers can be served from the tall unit.

For families with small children, a beverage center in the breezeway decreases kitchen traffic and discourages cooking interruptions. For the in-home business, a tall refrigerator keeps meetings going while beverages are served.



Bob Riggs, Sub-Zero Hawaii president

Storage flexibility

With five different units available, the 700 Series provides consumers with a range of choices for how much and what type of refrigeration they need in each room of the house. Within each storage area, state-of-the-art technology also allows consumers to set precise temperature zones for different types of food. A microprocessor reads each temperature zone every second and makes adjustments if necessary. The processor also adapts itself to dry or humid weather conditions and defrosts accordingly.

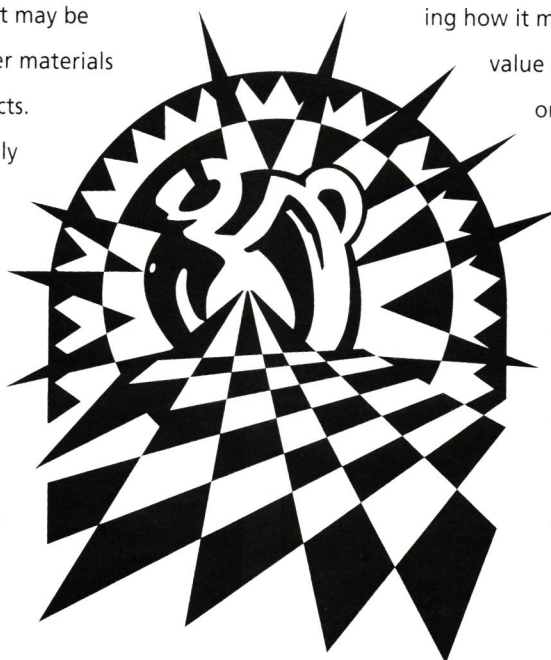
Sub-Zero Freezer Company is the Madison, Wisconsin-based manufacturer of premium built-in residential refrigeration. Currently, the company line features 18 refrigerator and/or freezer models that range from full-size to undercounter. The products are marketed under the 500 Series (full-size and ice maker models), Undercounter Models (refrigerators, freezers and combinations) and the new 700 Series (tall and base units, refrigerators, freezers and combinations).

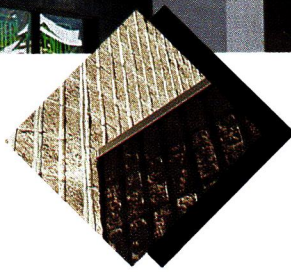
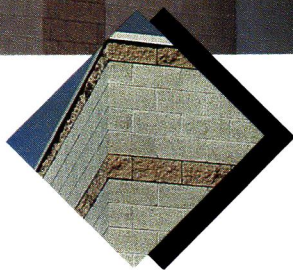
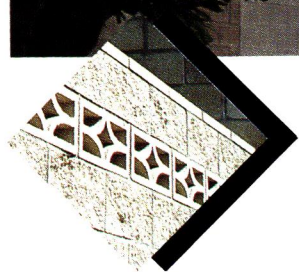
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water like a duck. It's come a long way since its name origin as a term covering natural earth products that had been exposed to high temperature. Ceramic tile today is synonymous with beauty, variety, and practicality. It is a favorite with many pace-setting Hawaii architects and interior designers and graces many island homes and landmark buildings.

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