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March 1992

Energy Efficiency in Architecture
Innovative Bathrooms

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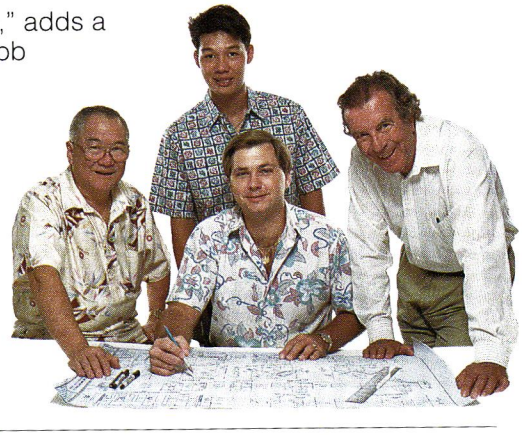

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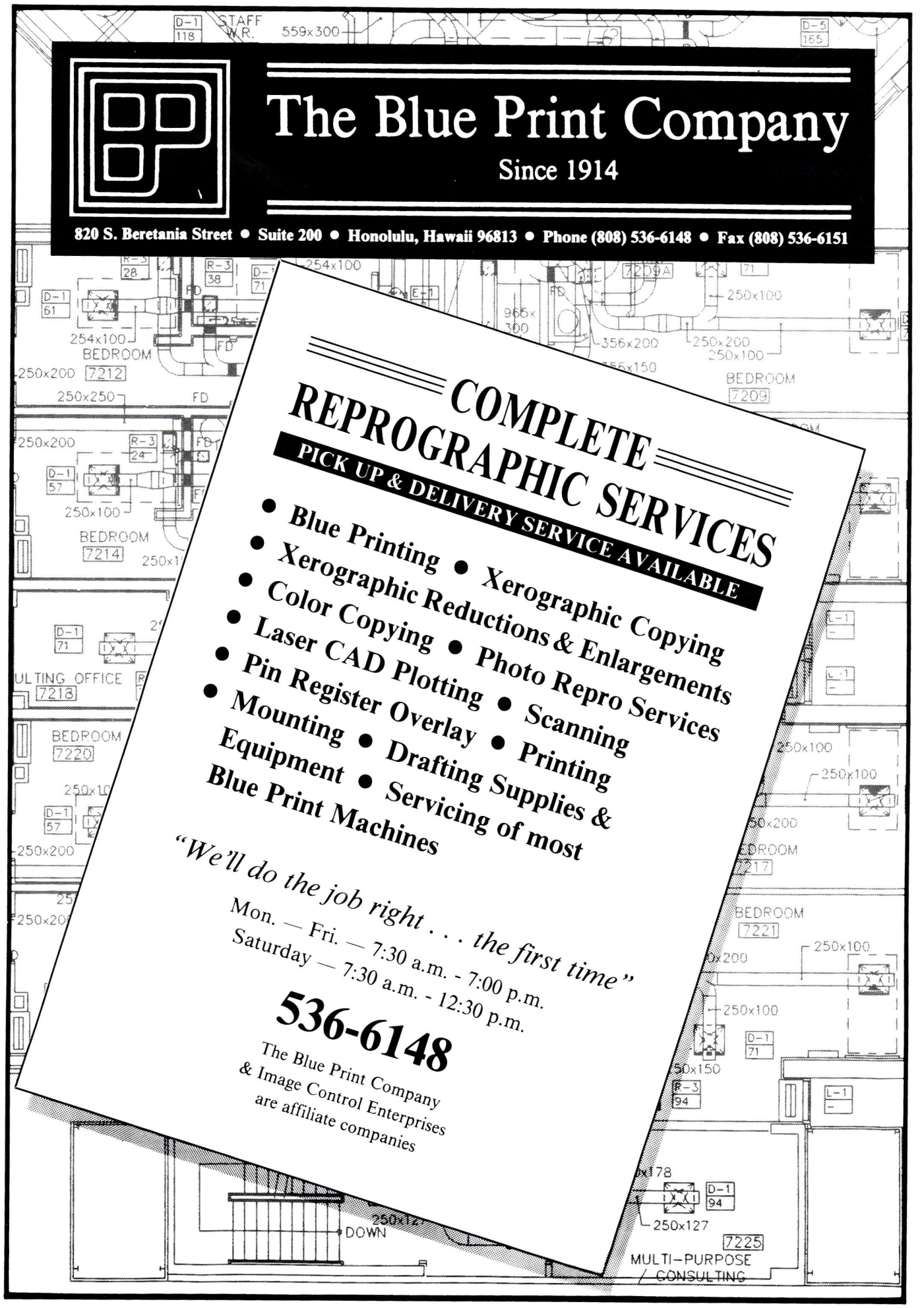
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Volume 21, Number 3 March 1992

Contents

Leadership Message

Energy Efficiency in Architecture

Innovative Bathrooms

STEVEN MINKOWSKI/MICHAEL KANOUFF PHOTO

This low-cost residence on rural agricultural land earned Maui architect Brian Boelter, AIA, a Maui Chapter/AIA Design Award of Merit.

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Leadership Message

Hawaii's Affordable Housing Crisis

by Marie E. Kimmey, AIA
President, Maui Chapter/AIA

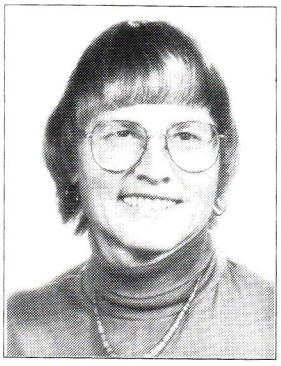
The issue of affordable housing has taken top priority in Hawaii because of the state's severe housing shortage and because affordable housing offers a platform through which local government leaders can be seen to serve the community.

However, the major cause of the affordable housing problem has been government policy itself. Hawaii has the strictest land-use laws in the United States. Less than 5 percent of the state's land is available for urban use, with the rest almost equally divided between conservation and ag lands.

The role that this artificially created scarcity of land plays in causing high home prices is obvious, but we must also realize that Hawaii's torturous permit processes and infrastructure demands drive up the cost of housing as well. The additional costs placed on the land can easily total $50,000 to $100,000 per residential lot.

State and county governments have attempted to require that developers provide certain percentages of homes in their projects at below-market prices. This has been proclaimed as a major strategy for bringing affordable homes into existence.

Affordable properties are made possible only because of the subsidy paid by the higher-priced homes and buyers turn away from these and begin to pursue lower-priced affordable homes. Developers are unable to sell over-priced homes and developments either fail, or worse yet, are not built at all.



Marie E. Kimmey, AIA

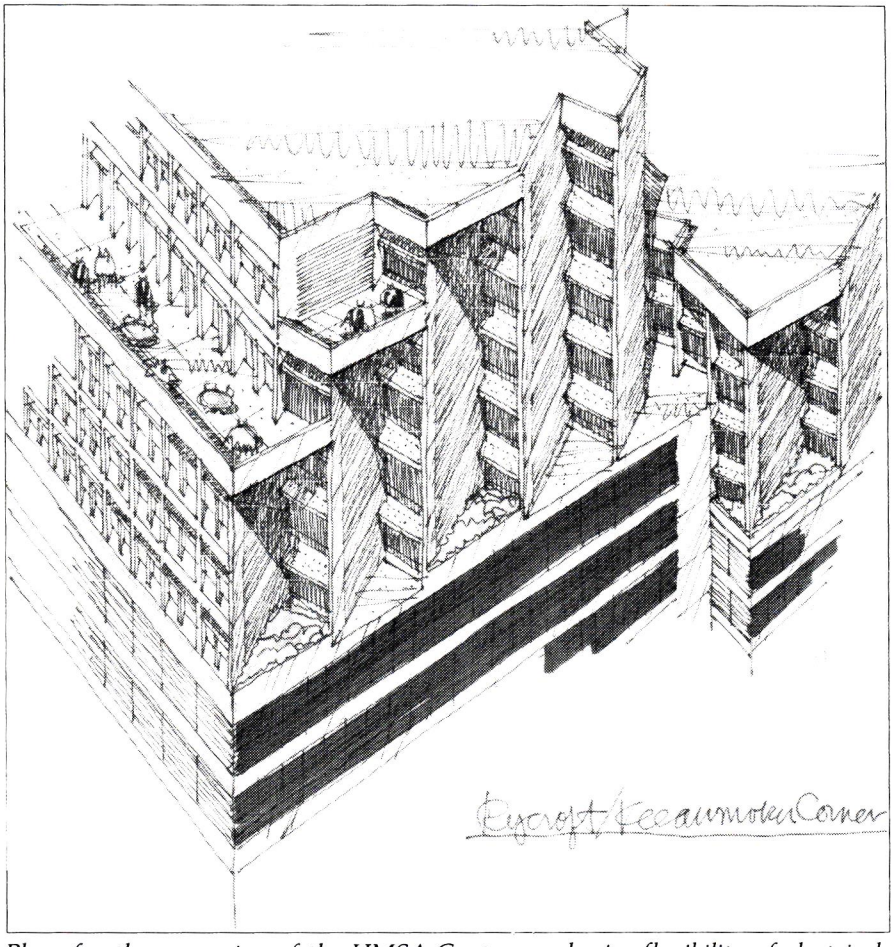
Supply of residential land cannot be restricted with the hope that home prices can be controlled by design or low-cost construction methods and materials. The land and permits to build must be made more accessible. Infrastructure requirements and assessments must be lessened or waived for residences.

Of special concern at this time is the shameful fact that the majority of Hawaii's homeless people are Hawaiians, while Hawaiian homelands remain empty due to permit delays, infrastructure demands and assessment fee requirements. Would not a simpler home and neighborhood be preferable to no home at all?

We architects and planners need to put out heads together to offer new solutions to the modern housing problems. We must provide answers and steer our lawmakers into realistic and productive affordable housing programs as alternatives to the existing rigidly restricted legislation. **HA**

HMSA Center: A Decade in Energy Design

by Christopher J. Smith, FAIA



Plans for the expansion of the HMSA Center emphasize flexibility of electrical consumption. The 110,000-square-foot addition is shown to the right.

ENERGY.

No longer quite the buzz word it was in the early '80s, but, not too surprisingly, still a relevant architectural subject. As it should be.

Although the strategies for conserving energy have changed somewhat over the decade since the HMSA Center was designed in 1982, many of the basic design features, e.g. daylighting and solar heat gain, are still valid. The emphasis today is in working with the flexibility of electrical consumption. The ability to develop a HECO demand-side management program for energy consumption is as significant now as some of the HMSA Center's original physical design elements.

In 1981, The CJS Group Architects and Will Beaton, AIA, then with the firm, pioneered strategies for the first comprehensive energy-conscious building for one-tenant use, a mid-rise concept, in combination with an interior courtyard, could be developed that was ideal for daylighting and solar shading.

Under optimum conditions (clear sky in June), as much as 58 percent of the center's net office floor area receives natural light of 40-60 foot candles. At its worst (December), 32 percent of the floor area is naturally lit. These energy design techniques originally reduced by 35 percent the electricity needed for air conditioning and lighting over a standard building built during that period.

When The CJS Group Architects undertook the project to add 110,000 square feet to the HMSA Center last year, we recognized that we had an "energy efficient office laboratory" to study. Since the structure had been designed to be one of the first "smart" buildings incorporating a program to monitor all the energy demands, we had a unique opportunity to evaluate the success of the existing facility.

We learned that because of the critical demand of the space and the need to use higher than planned interior partitions, the full utilization of the daylighting was compromised. Also, the fluorescent light monitors were not efficient and were eventually removed.

The envelope of the existing building is an outstanding example of architecture that responds to energy and daylighting issues. The fins and light shelves on the new building exterior are designed to control solar radiation. During morning and afternoon hours with low sun angles, the fins control undesirable, excessive solar heat gain on glazing. The light shelves also produce a deep penetration of daylight and control the sun's direct penetration.

Both of these components improve visual quality and thermal comfort. The use of daylight as an energy design strategy has a double benefit in that it improves the quality of lighting as well as reduces the energy operating costs for electric lighting and subsequent cooling loads.

When we started the search for new strategies — and were fortunate in securing the services of the ENSAR Group from Boulder, Colorado — it was not surprising that lighting was the first major issue for review. Since the shading and cooling demand is 34 percent of the load and somewhat fixed by the success of the existing architectural configuration, the only other major areas for review were the lighting load at 23 percent and the plug loads at 32 percent.

The lighting component, so important in maintaining the quality of the space, requires special consideration. In addition to maintaining the quality of illumination via daylighting, the options for selecting unique artificial lighting scenarios are exciting opportunities that did not exist when the building was first envisioned.

Also, the 1.55 watts per square foot design for lighting can now be reduced to .75 watts per square foot with today's advancements. In the future (perhaps 10 years), energy efficient products may offer a possible .4 watts per square foot.

It's also important to recognize that as office tasks move away from predominantly paper to a computer-based environment, these tasks require a completely different lighting scheme in terms of illuminance levels and reflected glare. As is the case with HMSA, their computer-users require low levels of light in order to reduce the amount of light reflected off the computer screens. In contrast (no pun intended), paper-based

tasks require higher illuminance levels than computer screens.

To correctly illuminate today's workplace, a layered system of ambient, task and accent lighting is required. A layered lighting system is the first step in energy efficiency and will cause the ambient lighting system to play a lesser role in providing task lighting, to one-third of traditional levels. The second step is to provide energy efficient lamps, ballasts, luminaires and controls. The third step is to provide a maintenance manual and training so that the energy efficient design elements function as designed.

The proposed lighting scheme is the most significant difference in strategies in the way it improves lighting quality with a layered approach that combines daylighting, indirect lighting, task lighting and direct lighting. Other differences reflect the changes in high performance glazing and the use of more sophisticated electrical and HVAC systems and controls that will be more reliable and cost less.

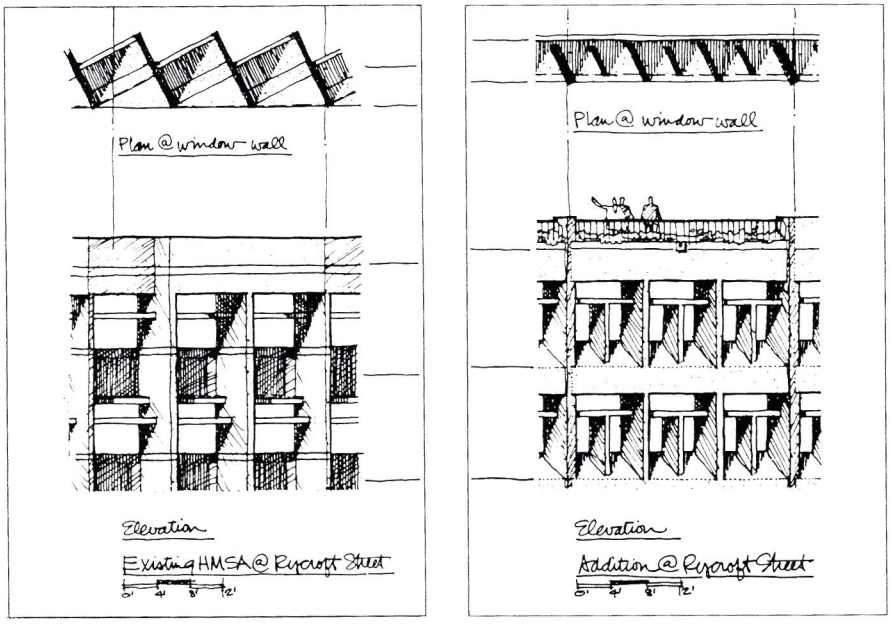
The biggest difference in the energy strategies of 1981 and 1992 is a focus that has changed from the costs of electricity and construction to a methodology of how we consume or use the energy.

In the initial building, the higher cost of energy and the cost of construction, which had hit a low, combined to make the payback for the physical components of daylight shelves, fins, etc., quite significant. Today, the game strategy has changed. While energy rates are still a concern, the ability to negotiate volume rates and current construction costs make it harder to rationalize a much longer payback schedule.

Strikingly, the intriguing new opportunities for energy savings center on the advances in artificial lighting and efficient office equipment. When equipment plug loads exceed one-third of energy needs, energy-conserving equipment also becomes cost effective.

All in all, short-term costs or savings aside, it is good sense to conserve energy. We are, as I also like to think, all on this "spaceship called Earth" together. Our conscientious approach to using energy can only help preserve our environment and provide a better place for all of us to live. **HA**

Christopher J. Smith, FAIA, is the president of The CJS Group Architects, Ltd.



Above, *the existing elevation of the HMSA Center reflects the daylight shelves, fins, etc.* Right, *the elevation for the center's addition shows how the windows will be changed.*

Calculating Energy Performance

Energy performance of the proposed HMSA building expansion was analyzed using a computer simulation tool known as DOE2.ID. It is a program that reads hourly weather data and calculates energy flows in the building, the heating, ventilating and air conditioning (HVAC) system and the plant. It repeats these calculations for each of the 8,760 hours in a year. Typical Meteorological Year (TMY) weather data for Honolulu was used in this analysis.

DOE2 performs hourly energy balance calculations on each building zone. Transient heat flow is determined to take account of the thermal mass effects of building construction components. Hourly loads are passed to the systems simulator which calculates the energy required by the HVAC system to meet zone loads and ventilation air loads. Fan energy use is also accounted for at the systems level. Finally, hourly system loads are passed to the plant simulation module where hourly energy requirements for chillers and domestic water heaters are determined.

DOE2 is a powerful analysis tool because of the breadth of system and plant types it can model, because of the number of variables available to the user, and because of the detail of information it is capable of reporting. The DOE2 model was developed by the United States Department of Energy and is considered a standard analysis tool by the engineering community. **HA**

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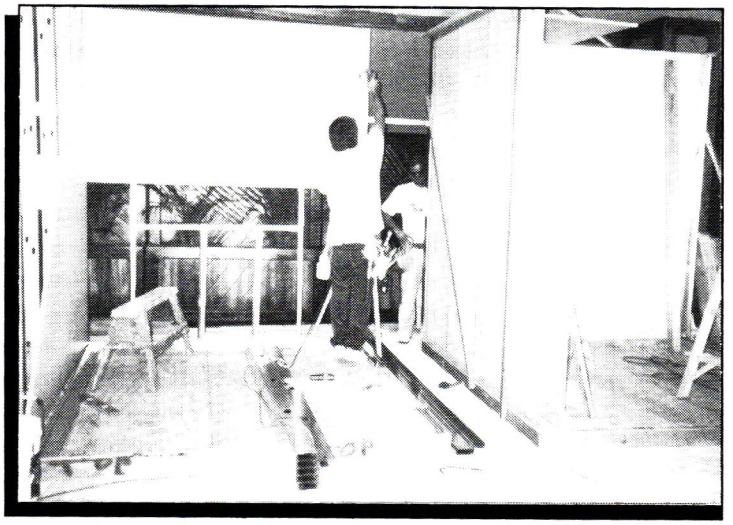

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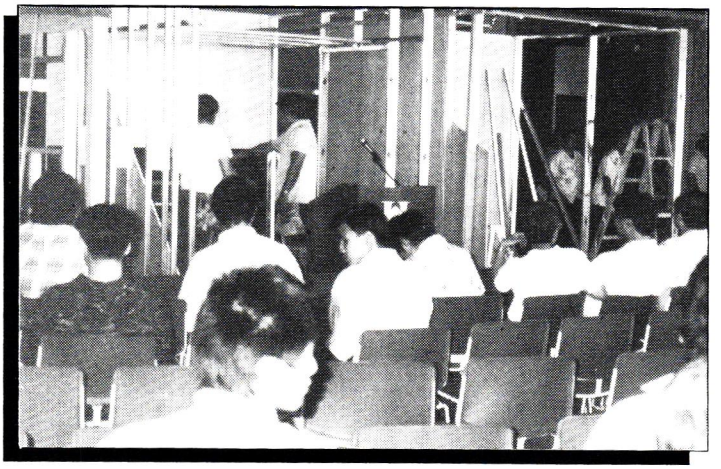

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A Proposed Model Energy Code:

Rumors, Myths and Megawatts

by Cliff Terry, AIA and Kent Royle, AIA

Q: What's all this I've been reading about a new energy code?

A: The Energy Division of the DBEDT has been working for several years to draft a model energy code. This code would be proposed to the counties for adoption as part of their building codes, to supersede the current Article 7 of the Honolulu Building Code Amendments.

Q: Why do we need a new energy code in the first place? What's wrong with the existing one?

A: The state believes that a more stringent energy code, tailored to Hawaii's climate, can result in substantial energy savings. This is particularly important given that Hawaii is the most dependent of any state on imported oil for its energy source.

Q: Why weren't the architects consulted about this new code?

A: The AIA has been actively involved in the formulation and review of the model code since the project began several years ago. The Energy Committee, which has included over a dozen AIA members over the past several years, has put on brown bag lunch seminars for the membership to familiarize themselves with the code; met for several all-day sessions with the contractor who is writing the code; provided review comments for the several draft versions of the code which have been published; and made the code available to the general membership for its review and input.

Q: Isn't the new code going to cripple my creativity by providing a set of prescriptive standards, thereby turning design into a "cookbook" process?

A: Absolutely not. The code provides for three methods of ensuring compliance, including a performance-based method, as well as a prescriptive one. In addition, there is a great deal of latitude provided a designer who can demonstrate, through the use of a simple computer program, that his design, while not meeting any of the specific code standards, results in a building with equivalent performance.

Q: What about single-family residences? Isn't the code going to substantially increased their cost in an already difficult housing market?

A: No (with one exception). In nearly every case where requirements are spelled out for types of materials, installation of insulation materials, lengths of overhangs, amount and type of glazing, ect., a specific exclusion is provided for non-air conditioned single-family residences. It's not true that single-wall construction will be outlawed by the code; the requirement for wall insulation on air conditioned buildings is waived for single-wall houses.

The one exception mentioned above is that the code initially proposed requiring solar water heaters. After public input and discussions, the water heating section is being revised to provide for design based on a water heating energy budget rather than specifying a type of water heater.

Q: What about dark roofs? I read that the Honolulu Academy of Arts would not have been allowed its dark-colored tile roof if the code had been in effect when it was designed.

A: The code allows any color roofing. Hawaii's energy code is unique among state energy codes in that it recognizes the importance of roof color in our tropical climate and allows the required level of insulation to be reduced with light-colored roofing.

Q: What about the building officials? Are they ready to buy into this new code?

A: The building officials of all of the counties have participated in the formulation and review of the model code. While it's safe to say they are not enthusiastic about yet another procedure for them to follow and another set of documents to check, they understand the importance of energy conservation in Hawaii and are considering adoption of

the code. The energy committee has been working with the officials to devise some simple compliance tools and forms for them to use. In all probability an affidavit or certificate will be required of the architect or mechanical engineer, stating that his design conforms to the energy code, similar to the one stating conformance with handicapped requirements.

Q: When is the code going to be put into effect?

A: The City and County of Honolulu may soon introduce legislation to adopt the code. The other counties will probably wait to see the results of the Honolulu effort before adopting it themselves.

Q: How are we going to learn about the code and how to use it?

A: As part of the ongoing $250,000 contract the AIA has with the DBEDT, a series of seminars will be held on all major islands to familiarize architects and other professionals with the code and provide instruction in compliance with its requirements. These seminars will probably begin later this year.

Q: Where can I learn more about the code?

A: The Honolulu Chapter office has a draft copy for review. The state Energy Division can provide information as well; call Howard Wiig at 587-3811 to find out how to obtain a copy.

Q: So it's safe to assume that the new energy code will still allow me to design my building the way I'd like to, won't create a terrible burden for me to comply with, and will probably result in a substantial energy savings for the state of Hawaii in the long run?

A: You've got it!

Cliff Terry, AIA, is president of TRB/Architects, Ltd. Kent Royle, AIA, is an associate of the same firm. Both have been actively involved in various energy conservation programs for years.

Natural Ventilation Good Choice in Hawaii

The following excerpt is reprinted, with permission, from "Hawaiian Designs, Strategies for Energy Efficient Architecture," a book written by Kent Royle, AIA and Cliff Terry, AIA, both of TRB/Hawaii, Ltd. The publication presents several strategies for energy efficient architecture design in Hawaii and provides practical guidelines to serve as the basis for decision-making during the conceptual and schematic stages of a project.

The book was funded by the U.S. Department of Energy and prepared in 1990 by the Honolulu Chapter/AIA for the state Department of Business and Economic Development, Energy Division. Copies of the book are available for purchase through the DBED by calling 587-3810.

JONI KETTER PHOTO

U.S.S. Arizona Hall at Pearl Harbor is one structure that utilizes natural ventilation. The high-rise barracks earned Media 5 Limited a 1991 Governor's Energy Award. TRB Hawaii was the energy consultant.

A properly designed, naturally ventilated building can provide comfortable climatic conditions throughout a major portion of the year in Hawaii. When augmented by an auxiliary mechanical system, such as ceiling fans or mechanical ventilation, comfort can be provided for most people and situations throughout the entire year. In addition, a naturally ventilated building will provide significant energy and capital investment savings since an air conditioning system will not be installed or operated. Successful use of natural ventilation requires detailed design analysis during the early phases of a project.

Site Selection and Planning

Consideration of the wind and thermal implications of site planning and selection must be given the highest priority for successful natural cooling. Buildings must be designed to take advantage of the favorable (and mitigate the adverse) characteristics of the site and its microclimate. For buildings using natural ventilation, this includes avoiding enclosed valleys and sheltered locations, maintaining adequate building spacing (avoiding wind shadows and wakes), and organizing the site layout to increase interior air velocities and minimize interior heat gain.

Sites near the crests of hills or ridges may provide increased exposure to winds while valleys and sheltered locations may lack the required air velocities. Ridgecrests can receive wind speeds which are often 20 to 80 percent higher than the surrounding flat ground. In very windy locations such sites may suffer from too much wind, causing potential structural and driven rain problems.

Design Strategies

When the wind strikes an obstruction, a wake zone forms downwind. Within this wake, wind velocities will decrease and wind direction will be changed. To maintain maximum exposure to the wind for ventilation, buildings should be sited outside the wake of any obstruction to allow each to act in isolation. To achieve this, a clear spacing of at least 5H (5x the height of the upwind building) is required. Building spacing of less than 1.5H

(1-½ x the height of the upwind building) may result in the establishment of a stable vortex or roller of trapped air, and ventilation through the downwind building can be quite weak. For spacing between 1.5H and 5H, intermittent vortexes may occur and ventilation in the downwind building will be sporadic and much less effective.

When windows are restricted to only one surface, ventilation is usually weak and independent of the wind direction. Average internal wind speed will not change significantly with increasing window size. One-sided ventilation can be made effective when two openings are placed on the windward face, the wind angle is oblique (20-70 degrees), the windows are as far apart as possible, and deflectors, such as wingwalls, are used.

Height of Windows

For wind driven ventilation, the height of the inlet has a great effect on the airflow pattern in a room while the height of the outlet has little influence on interior airflow. Positive pressures built up on the windward face of the building can direct airflow up to the ceiling or down to the floor of a room. Pressures are related to the relative area of wall above and below the window. Thus, a window located high on the wall directs airflow up to the ceiling because the positive pressure built up on the building face is larger below the window than above it. There is usually an abrupt drop (up to 25%) in air-speed below the level of the inlet sill. For body cooling, the best location for windows is at or below body level. Remember that body level changes with room use: body level in a bedroom is at bed height, while body level in an office is at sitting height.

Window Selection

Many types of windows can be used successfully for natural ventilation. The shape of the inlet window is the most important factor in determining the efficiency of wind cooling. A horizontal shape is best at capturing and admitting winds for a variety of angles of wind incidence. The optimal shape has been found to be 8 times as wide as tall; however, smaller width to height ratios are also effective. In cross-ventilated rooms, the velocity of air flow is mainly determined by the area of the smallest opening. Average indoor velocity of airflow is mainly determined by the area of the smallest opening. Average indoor velocity is highest when outlet area/inlet area equals 1.25. Thus, roughly equivalent inlet and outlet areas result in good overall airflow. For maximum air changes in cross ventilated rooms, use the largest area of openings possible with inlet areas equal to, or slightly smaller than, the outlet area.

Buildings and landscaping can be designed to minimize the wake effect and allow for closer building spacing. If the buildings are staggered in a checkerboard pattern perpendicular to the wind, ventilation can be maintained for all buildings.

Placement of Openings

As wind strikes a building, a high pressure zone is created in front (upwind) of the object and a lower pressure area is created behind the object in the wake zone. Positive pressure on the windward side forces air into the building and negative pressure on the leeward side pulls it out of the building.

The rate of interior airflow is determined by the magnitude of the pressure difference across the building and the resistance to air flow of the openings. The size, shape, type, and location of openings, especially the inlets, determine the velocity and pattern of the internal airflow. **HA**

MAUI CHAPTER/AIA 1991 DESIGN AWARDS

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Brian Boelter, AIA
Low-Cost Residence on Two Acres in Agricultural Subdivision

The aim of the project was to design a home, within a certain budget on a two-acre parcel of rural agricultural land. A minimum 1,250 square-foot house size and strict building materials were required in the subdivision covenants.

The owners are a younger couple who do not have children. Therefore, unnecessary bedroom space was to be avoided and dramatic entertaining spaces were to be highlighted. The owners also wanted to have a separate, private loft space above the garage to use as a guest room or office. The owner's connection with New England was to be shown in the design of the house, but with a contemporary twist.

The result was two two-story buildings. The first, the 1,250-square-foot main house, was connected by a covered bridge to a 1,000-square-foot garage/laundry with loft space above. An exterior deck was added by the owner per the architect's design.

Symmetrical order was important in the design and layout of the interior spaces and especially in the arrangement of the varied windows and door units.

Subdivision view corridors were utilized to give a clear ocean view but also block the view of the lower neighbors' homes from the owners' living room. These homes were lined onto this corridor at an angle. The project thus was sited having the first neighbor home block the owner's view of the lower homes.

Exterior materials included painted cedar lap siding, colored aluminum windows, cedar-shingled roof and copper flashing.

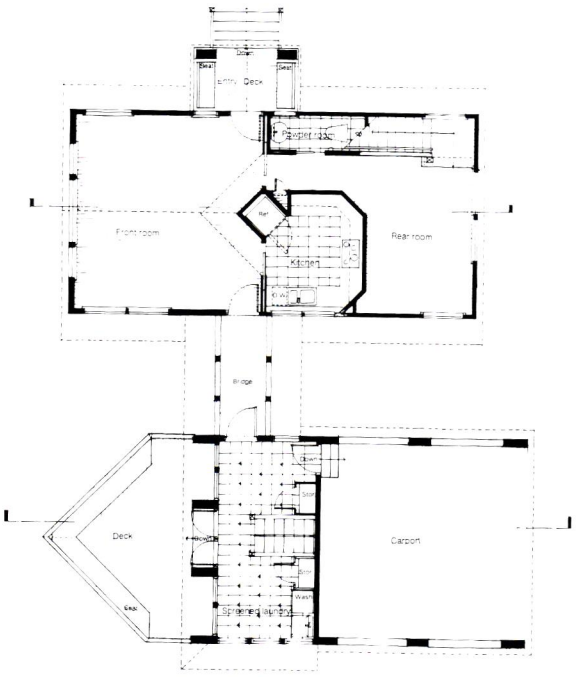
Interior materials included painted gypsum-board walls and ceilings, Douglas Fir decking and painted exposed beams, ceramic tile, oak floors and cabinets, painted, raised Douglas Fir panel or painted and sandblasted French doors with Schlage polished chrome hardware. HA

STEVEN MINKOWSKI/MICHAEL KANOUFF PHOTO

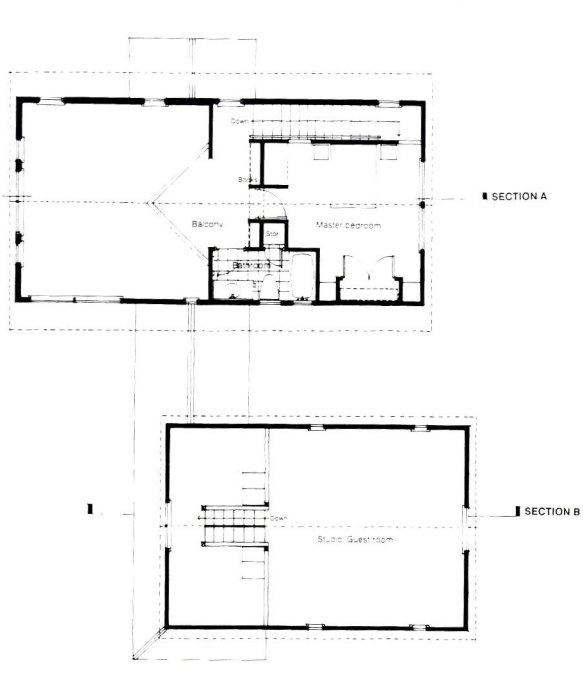
The large windows from the main living area provide a direct ocean view.

STEVEN MINKOWSKI/MICHAEL KANOUFF PHOTO

The two two-story buildings include the main house, left, *connected to the carport/laundry area by a covered walkway. Floor plans shown below.*



FLOOR PLAN FIRST FLOOR



FLOOR PLAN SECOND FLOOR

Fantastic Bathroom Plans

by Susan Palmer, CKD

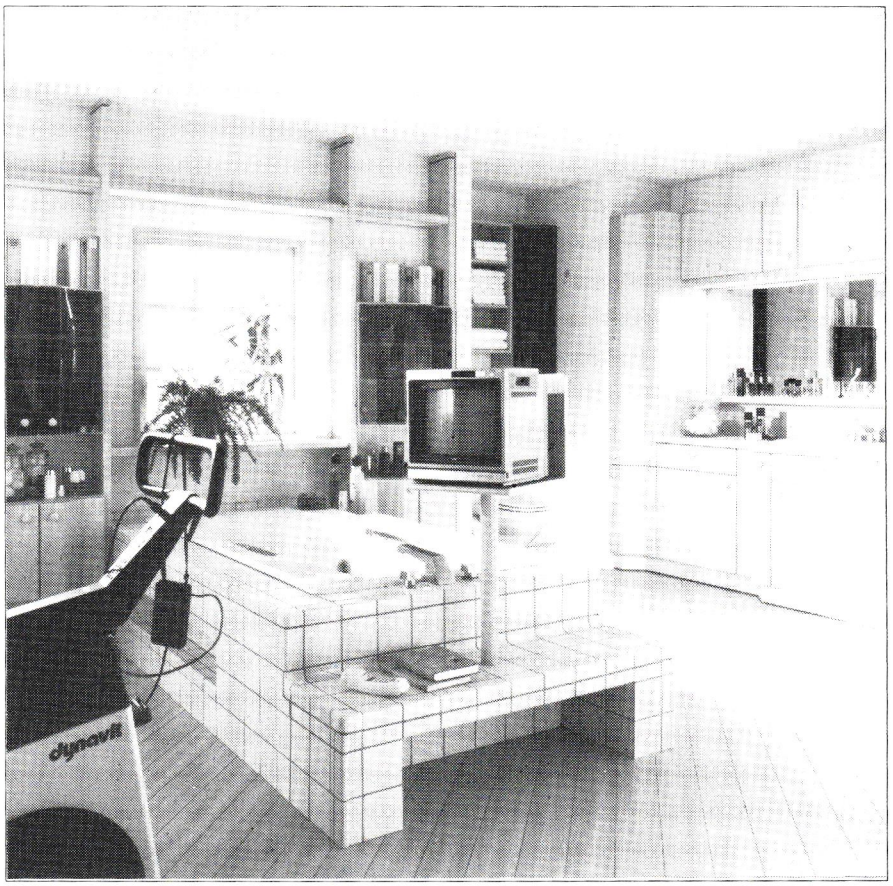
New innovative technology, along with creative inspiration, can result in a dream bathroom your client will be proud of.

Today's baths have blossomed from a purely functional room into a place utilizing a variety of individual family needs and desires, with manufacturers providing a myriad of products to meet these new demands. The assortment of fixtures, faucets and bathtubs offered in the marketplace provide an ever-increasing palette of colors and forms to assist designers in developing a beautiful environment. Custom cabinets with innovative appointments provide not only pleasure to the eye but much needed organization for active families.

On most families' "wish" list is a desire for extra storage. Designers are taking a second look at available space and challenging themselves to create storage in previously overlooked nooks and crannies.

Most homes built in recent years are very limited in the floor space that was allocated to the bathrooms.

If the perimeter walls cannot be moved, then the challenge is to organize the bathroom in such a manner that will accommodate all



Today's bathrooms have become more than a functional room. New technology and ingenious products make today's baths a retreat, offering large spaces and the finest amenities.

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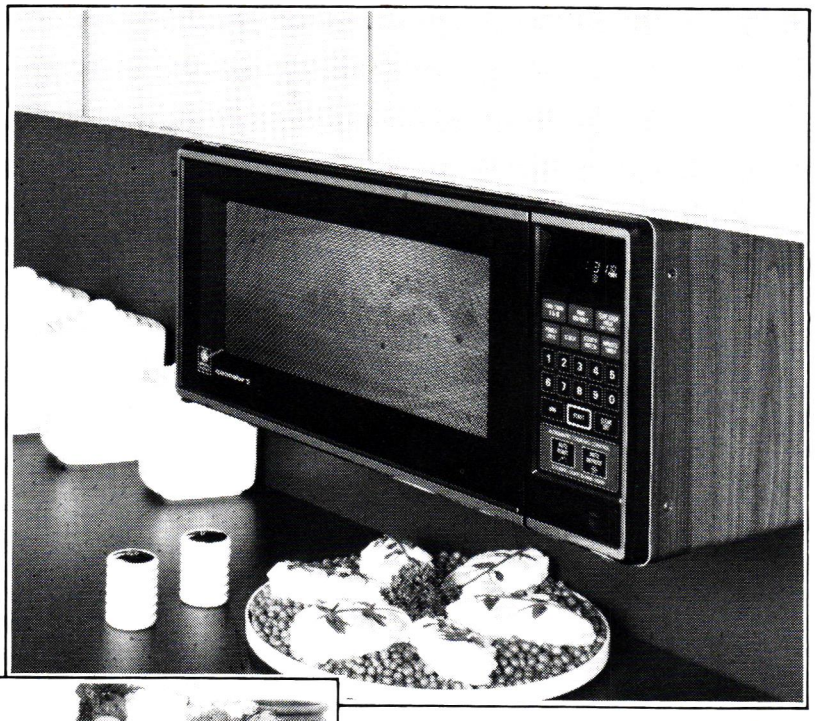

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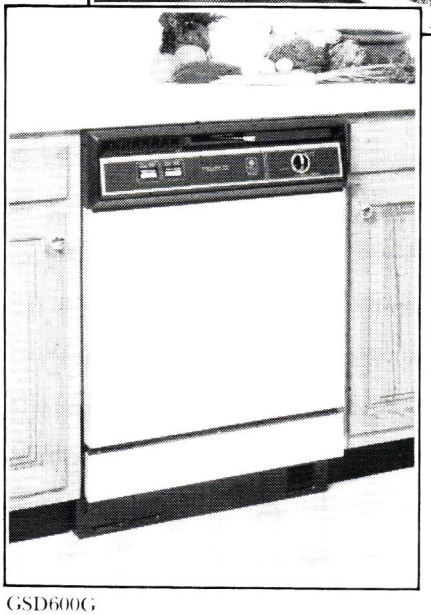

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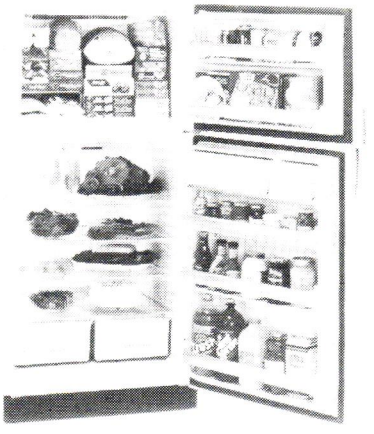

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the family's grooming, cleaning and linen equipment. Built-ins recessed between studs, dividers in drawers, and compartments in roll-out shelves can provide easy access and visibility.

Many clients are requesting that the bathroom provide a private retreat by incorporating spas, steamrooms or saunas. Exercise and entertainment equipment planned into the design contribute to much-needed relaxation for many lifestyles. Special planning and installation considerations are the keys to successful creative designs.

A myriad of new products and equipment is available from a variety of companies to assist in the creation of a fantastic bathroom design. **HA**

Susan Palmer, CKD, is a design associate at Kitchen Concepts Plus, Inc., in Honolulu. She holds a degree in interior design and is a past president of The Aloha Chapter of the National Kitchen and Bath Association. A registered, certified kitchen designer, she is presently meeting the requirements for a certified bath designer.

Innovative Bathrooms

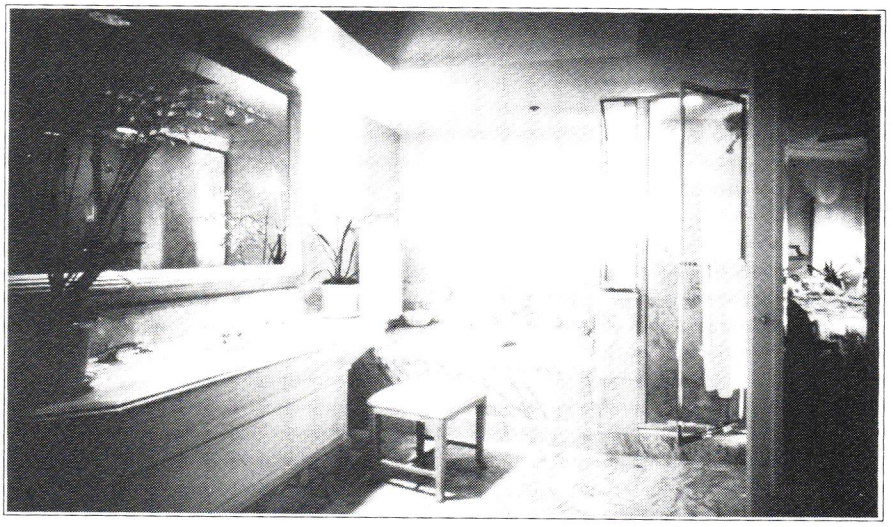
Resort Trends: Views, Space and Fixtures

by Mazeppa King Costa

The trend in resort bathroom design is about the same as it is for residential baths: spaciousness, views/openness, and as many fixtures as possible.

These are the words of Henry Kwok, whose experience as a design principal with Wimberly Allison Tong & Goo, has afforded him the opportunity to design upscale resorts for Indonesia, Korea, Malaysia, Singapore, Japan and Australia.

He goes on to say, "It makes sense for resort baths to be large. In general, the guestroom is used by two or more people, staying an average of four to five days, participating in a lot of physical activity. They take a lot of baths.



Bathrooms at Four Seasons Resort Wailea exemplify the luxurious, spacious baths rapidly becoming de rigueur at four- and five-star resorts. The elegant bath has approximately 150 square feet of floor space, separate tub and shower fixtures, enclosed toilet, dual lavatories, and features coffered ceilings and a generous amount of marble.

"Resorts cater to both the independent traveler and group tours. The single tour group traveler often shares a room with a stranger, so designing for group occupancy — which may even mean an opposite sex roommate — bathrooms must be large and offer privacy.

"Thus, the four-fixture bath with both wet and dry areas: soaking tub, separate shower, enclosed toilet, and lavatory — or dual lavatories. Addition of a bidet makes it a five-fixture bath.

Kwok says further, "For Japanese clients you must have a separate tub and shower. It is required. This is related not only to Japanese bath habits but also to maintenance costs.

"They like to shower in the afternoon following tennis or swimming, have dinner, and then have a soaking bath after dinner. While they are out for dinner, the housekeeping staff can quickly clean a dedicated shower. A combination tub-shower takes much longer to clean.

"The most innovative ideas in resort bathrooms are being driven by the trend toward openness and the search for light-even views in bathrooms. When we can't put a window in the bath, we can sometimes put the tub and/or shower facing the bedroom and open the bath up to share the view.

"And a one-way mirror allows a bath occupant to see into the bedroom and possibly a view beyond but does not allow the bedroom occupant to see into the bath.

"There is even talk now of trying to find a way to utilize skylights in hotel baths. This would lead to a stepping type of design and a terracing down. **HA**

Mazeppa King Costa is a Honolulu-based writer and public relations specialist.

BIA Expo Set For March 11, 12

The 22nd annual Building Materials Exposition, sponsored by the Building Industry Association of Hawaii and GECC Financial, will be held March 11, from 4 to 9 p.m. and March 12, from 11 a.m. to 9 p.m. at the Neal Blaisdell Center Exhibition Hall.

Professionals involved in the building industry and related businesses, such as real estate and finance, and from industry-related military and government agencies are welcome to attend. A business card is required for admission to the exhibition, which includes a cocktail reception from 5 to 9 p.m. both days.

The Building Materials Expo is Hawaii's major annual trade show for companies supplying Hawaii's construction industry with materials, equipment and services. The approximately 250 exhibits will range from windows, roofs, appliances and cabinets to trucks and forklifts.

The special feature exhibit at this year's Expo will be a scale model of the City of Kapolei and a multi-media presentation covering the master plan for the entire 32,000-acre Kapolei region.

The multi-media presentation, by Campbell Estate's Kapolei Marketing Department, will be given every hour on the hour from 5 to 8 p.m. March 11, and from noon to 8 p.m. March 12.

Expo attendees, with the exception of exhibitors, students, and non-trade guests, will receive an "Expo Prize Card" when they register. The card, when filled out by a specified number of exhibitors, entitles the bearer to enter a drawing for free trips to Las Vegas.

For additional information, contact Barbie Watanabe at the Building Industry Association of Hawaii, 847-4666. **HA**

Debating School's Design

Dear Editor:

Thank you for publishing the current plans and elevations of the school of architecture building at the Manoa campus (January 1992 issue). Unfortunately, the publication of this project comes a little late if there is to be a meaningful debate about the school's design program and criteria.

Mr. Leu, in his opinion letter published in the same issue, certainly raises some valid points.

I cannot fault the architects for designing a neo-classical building given the criteria and restrictions imposed upon them, but I do fault the "system" under which such criteria and restrictions become a mandate without any public debate or scrutiny. After all, this is not just any old building put up by the government.

The committee (?) making the rules was obviously afraid to challenge the designers to create a building of our time which is compatible with its surroundings but not the same as the other buildings in the quadrangle. The result is a building that neither offends nor inspires.

Could it be that the committee took a look at the more recently constructed "modern" buildings on campus and did not like what they saw? I took the time to look myself and must admit that buildings like Webster Hall, The Campus Center, The Art Building, Snyder Hall, Porteus ("Fortress") Hall and others are unattractive and un-inspiring to say the least. Can one blame the committee for choosing the safe path by asking for a building which "reflects the character" of what is nearby?

I cannot help but think, however, that a new School of Architecture building demands a different approach. It should be outstanding rather than blend in, inspiring rather than emulating, daring rather than boring, beautiful rather than just nice; above all, it should be a building of our time and reflect the culture and aspirations of today's society.

Are we up to that challenge? If not, we should be humble and design buildings which self-destruct in a few years and leave that task to future generations of architects.

Hans Riecke, AIA

Agreeing With Critique

Dear Editor:

Congratulations to M. Rae Douglass, AIA for his letter appearing in the February 1992 issue re: School of Architecture plans. I agree completely with his critique and only wish that the description, which almost seemed like a prescription, of the Mississippi State solution had been held back for a more opportune time. I too hope that "it is not too late to correct some of these problems" he described.

Vladimir Ossipoff, FAIA

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Mahalo for January Issue

Dear Editor:

I would like to take this opportunity to commend your January issue of *Hawaii Architect.* This purposeful concentration on the UH School of Architecture in what basically was a "single theme" issue was very much appreciated!

It has been over 15 years since *Hawaii Architect,* under the distinguished editorship of Jim Reinhardt, AIA and Bob Fox, AIA accomplished such a monumental feat — featuring various viewpoints by interdisciplinary environmental design and planning professionals on their roles and responsibilities in the local, national and international marketplace and the reality of what was then the more youthful UH Department of Architecture.

At that time, in the mid '70s, this professional journal was very instrumental in conveying to the Hawaii community and other mainland architects, our seminal aspirations for the UH School of Architecture. Many of these lofty (yet practical) dreams have not yet been realized in Hawaii!

However, at these particular crossroads, we may be on the verge of further convincing ourselves first, that we may eventually witness the emergence of a semi-tropical UH College of Architect, Environmental Planning and Design with departments of Landscape Architecture, Urban Design, Interior Design, Architectural Engineering, etc., and with prorogation in Facilities Administration, Construction Management, Historical Preservation, Futurists, etc. These collegiate and academic advancements are costly but essential to establish the necessary planning and design research base to further preserve and conserve our unique lands and natural resources including our fragile ecosystems in Hawaii and to exercise a greater degree of quality control over our built environments, in which architects, environmental planners and designers should be playing a greater role and being more responsibly compensated.

The informative articles were all very much appreciated. Mahalo nui loa.

Andrew Charles Yanoviak, AIA, CSI
Immediate Past Chair
HC/AIA Committee in Support
of the UH School of Architecture

School Deserves Better Design

Dear Editor:

It is very sad that the architecture profession in the state of Hawaii cannot produce a better design for the School of Architecture building. The building, by the nature of its purpose, should be the most innovative, environmentally sensitive structure on the campus. Instead the design is poorly proportioned, without scale and does not take advantage of the wonderful Hawaiian climate.

The studio spaces are very rigid and do not provide a stimulating atmosphere for the study of a field that requires creativity. I understand that you had some difficult criteria to meet in designing the building, but that is the challenge of architecture. This building does not positively reflect the abilities of Hawaiian architects and our ability to meet those challenges. Barry Baker was correct in January's issue of *Hawaii Architect,* when he said that "the building will generate significant worthwhile discussion." I have not heard any positive discussion about the building at all, and support Walter Leu's opinion which was stated in the same magazine.

I suggest that this project be placed on hold until a dean is selected for the School of Architecture. This is a critical design that will affect the reputation of the school and its students for the long, long lifetime of its structure. Please do not allow such a mediocre building to be the symbol of the quality of architectural education at the University of Hawaii.

J. Lee Rofkind, AIA

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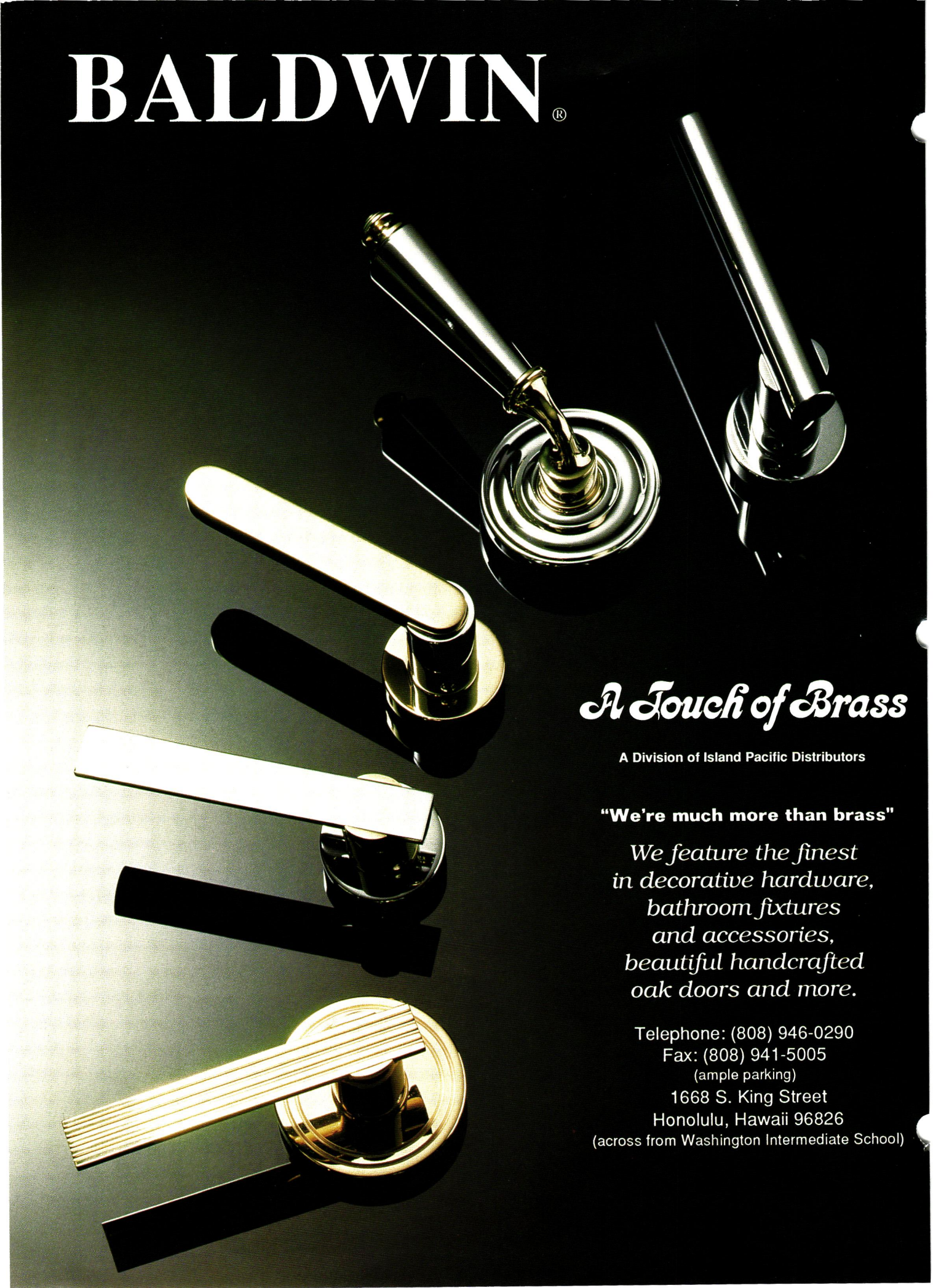

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AIA Directory Additions, Corrections

Editor's note: Following are additions and corrections to the 1992 Hawaii Council AIA Directory which was published in January. Please note those changes in your directory.

The following entry was omitted from the 1992 Hawaii Council AIA Directory:

Stephens, Terry, AIA
721 Iana St.
Kailua, HI 96734
261-6494

The following corrections should be added to the listings in the 1992 Hawaii Council AIA Directory:

Belknap, Christopher H., AIA
1519 Oneele Place
Honolulu, HI 96822
521-9951

Chong, Wayson, AIA
P.O. Box 191
Honolulu, HI 96810
988-7004

Knowles, Stanford C., AIA
2045 Alaeloa St.
Honolulu, HI 96821
737-1597

Stone, Alena Delos Reyes (Assoc.)
2639 S. King St. #203
Honolulu, HI 96826
947-9704

Thompson, A. Kimbal, AIA
932 Ward Ave. #410
Honolulu, HI 96814
526-1400

Also, the honorary titles bestowed upon Aaron Levine were omitted. It should have read:

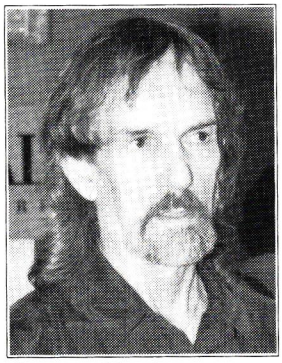
Levine, Aaron, Hon. AIA, FASLA, AICP
1519 Kalaniwai Place
Honolulu, HI 96821
373-9343

'Spirit of Adventure' Exhibited

Architects, designers and specifiers attended the Wilsonart® "Spirit of Adventure" exhibition in January which highlighted Ralph Wilson Plastics Co.'s addition of 69 new colors and patterns to its collection of decorative laminates. Aged metals and cracked pottery inspired these new contemporary laminate patterns. They were carefully chosen to reflect the latest trends in global color and design.

Mexican artist, Arturo Cuetara created a sculpture made of Wilsonart's® Gibraltar solid surfacing material.

In addition to the new colors, specialty products including tinted veneers create a total design package that is known as "surface synergy." Many of the displays on hand conveyed how the new colors and patterns relate to colors found in nature and how these colors create a total coordination with other manufacturers of fabrics, furniture, carpeting, etc. within the same color spectrum.



Arturo Cuetara

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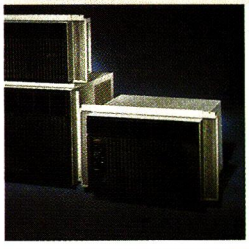

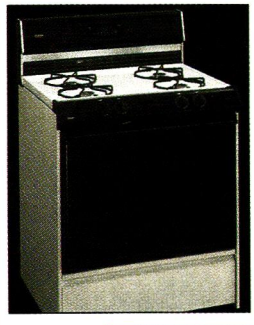

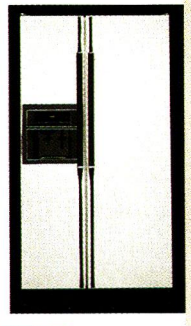

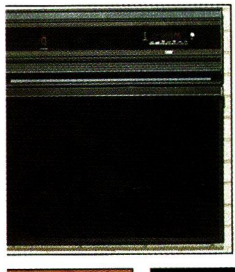

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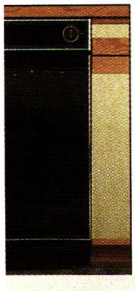

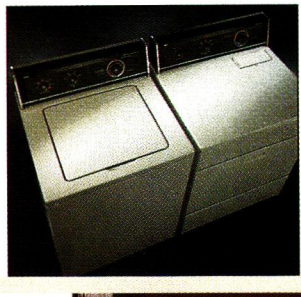

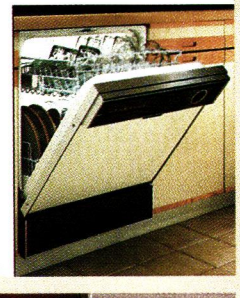

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