Architecture on Wheels
Italian Hill Towns
1993 HC/AIA Awards
When you can’t halt hospitality... 
Allied comes through

Major improvements in scattered areas at the Princess Kaiulani Hotel called for a supremely accommodating contractor. Even as beautifully redesigned lobbies emerged, envisioned by the Gulstrom Kosko Group, and the popular Ainahau Showroom expanded with the overview of Ted Garduque, AIA, the hotelier continued to serve.

"We were on a tight timeline facing a holiday opening," observed Garduque. "Allied’s crews were always responsive and concerned with quality execution. Even when the normal problems in renovation occurred, they stayed on top of things."

Adds GKG’s David Chung, AIA: "Allied reacts well to the design professional. Beyond this, they know that change at hotels cannot interfere with visitor pleasure. They worked odd hours and with diplomacy when hotel guests were around."

1717 Akahi Street Honolulu, Hawaii 96819 Telephone (808) 847-3763 Contractor License BC-5068

Architect David Chung, Hotel Food and Beverage Manager Chip Bahouth, Architect Ted Garduque, ABS Project Manager Ed Sakai
SHHHH!

Looking for some quiet? You'd be surprised how an attractive wall of masonry can muffle—or even snuff—the intrusion of construction noise and traffic din.

Big difference. BIG difference!
State Excise Tax Burdens Design Export Market

In the 1993 legislative session the American Institute of Architects strongly supported the concept of making exempt from Hawaii state excise tax all architectural, landscape architectural and engineering design services for out-of-state projects designed for out-of-state clients. This worthwhile idea was supported by Representatives David Stegmaier and Gene Ward. This exemption already exists for tangible personal goods and certain computer software services.

Hawaii’s design professionals already provide services for an international architecture market. This is shown by the fine work in this month’s Hawaii Architect magazine. During the recent economic boom in world construction, the largest Hawaii-based architectural firms derived about 20 percent of their income from international markets.

This is a very competitive market. The present 4.17 percent excise tax factor places Hawaii’s architects at a competitive disadvantage with architects in other states and nations. My colleagues tell me that their international clients have a hard time understanding the idea of an excise tax. The customary negotiating practice is to show this tax at the bottom line of the fee.

Encourage Expansion Abroad

The exemption would also encourage the pursuit of out-of-state markets by design professional businesses of all sizes. Hawaii is a limited market for architectural services in that it is surrounded by water upon which few buildings can be built. We cannot easily pursue the regional markets that our Mainland counterparts practice in. The states surrounding the Pacific Rim and geographically closest to Hawaii do not levy excise or service taxes upon architectural services. This places us in a more difficult competitive position.

Labor-Intensive Businesses

The architectural profession employs over 2000 people in Hawaii. This does not include other professionals such as engineers, planners and landscape architects. These businesses are extremely labor-intensive and spend about 55 percent of their revenue towards personal income which is ultimately taxable by the state.

There is also the possibility that Hawaii architects will build their international reputations in Hawaii and then relocate to a more hospitable tax environment. I suspect that many would otherwise gladly provide more local employment.

Opportunities for Graduates

The state already supports professional schools of architecture and engineering at the University of Hawaii. We need to ensure future professional opportunities for these graduates. Architecture is a clean industry with relatively higher wages than is common in other service industries.

As we see the continual decline of our agricultural export industries as a percentage of Hawaii’s economy, we need to encourage export markets for services to support our life in Hawaii.

Daniel G. Chun, AIA, is president, Hawaii State Council/AIA.
Leadership Message

4 State Excise Tax: Burdens Design Export Market
Excise tax penalizes Hawaiian firms competing for out-of-state projects.
by Daniel G. Chun, AIA

International Architecture

6 Golf Architecture: A global phenomenon
Golf is much more than just a game: it can be used to help finance resort destinations on five continents.
by Mazeppa King Costa

8 Disneyland, Hotel: Mickey’s Paris domain
Hotel designed by Wimberly Allison Tong & Goo becomes Euro Disney landmark.
by Mazeppa King Costa

16 Italian Communities: A learning experience
Artist relates travels through picturesque compact Italian hillside towns.
by Nick H. Huddleston, AIA

Educational Architecture

25 Kaumuali’i Elementary: Receives national recognition
Kauai’s school design selected as one of nation’s best.

Features

10 Iniki: Part II: Assessing the damage
Warming trends, El Niño’s behavior and changing weather patterns could spell trouble in paradise.
by Sam Monet

14 Roofing Supplies: Business is about people
Roofing Supply Inc.’s owners say treating customers and employees as number one is key to their success in business.
by Paul Sanders

26 Fort Street Mall: Time for a facelift
Landscape architects describe the Fort Street Mall rejuvenation project.
by Stan Duncan, ASLA, and Russell Chung, ASLA

20 News Briefs
21 News
23 HC/AIA Award Winners Announced

In this issue...

International Architecture is the focus of this issue of Hawai‘i Architect.
The cover features the Palm Hills Golf Clubhouse in Okinawa, designed by WATG.
The practice of architecture is no longer confined by natural geographical boundaries.
The growing practice of seeing things through “global glasses” is opening up new design opportunities for Hawaiian firms worldwide, as well as new challenges. A few architectural firms are exporting design architecture, operating on five continents and establishing worldwide reputations, beyond the islands’ confines.

In Europe this summer, millions of people going to Euro Disney are also experiencing a WATG fantasy hotel—the Disneyland Hotel, flagship of Euro Disney near Paris, which functions as the gateway to this amusement park.

Some other Hawaiian firms are taking advantage of the changing marketplace, contributing design expertise to dozens of international projects, especially throughout Asia, winning design commissions in competition with architectural firms from the mainland and foreign countries despite taxation by the state on exports, a burden their competitors do not have to shoulder.

With the opening of huge markets in Asia, especially China, the demand for architectural services will grow and the islands, because of their strategic location in the Pacific region, should benefit.

PMP Company Ltd

Publishers

Publisher/Executive Editor Peggi Marshall Murchison
Sales Manager Miki Riker
Managing Editor Paul Sanders
Art Director Maria Bracho
Production Manager Cynthia Becklund
Graphic Artists Leonardo Henobio Jr., Cheryl Ruddach
Typography/Production Lara Prestfeldt Jaracz, Rose Cabanlit
Accounting Manager Susan Colletto

Copyright ©1993 PMP Company, Ltd., 1034 Kilani Avenue, Wahiawa, Hawai‘i 96786. Phone 621-8200, Fax 622-3025. All rights reserved. Reproduction of the whole or any part of the contents of Hawai’i Architect without written permission is prohibited. Postmaster, send change of address to Hawai‘i Architect (ISSN 0019-0311) at 1034 Kilani Ave., Wahiawa, Hawai‘i 96786.
Environmental considerations today are viewed in a global context. A lot of people worry about global warming and practically everybody is keeping an eye on the global economy. So what are developers doing to keep pace? Well, for one thing, golf has gone global. Developers are planning and building golf resorts, golf courses, golf clubhouses and golf condominiums in resort areas the world over. Thus, golf architecture is a growing specialty for the design and construction industry. And the game promises a lot for the lean '90s.

Wimberly Allison Tong & Goo (WAT&G) is one of the firms benefiting from the global spread of golf. CHARLES CORWIN, a WAT&G principal, says the firm has found its golf-related work growing exponentially as the surge of interest in golf grows and radiates around the globe.

WAT&G has active golf-related projects on five continents; five Hawaiian islands; and five other islands (Singapore, Taiwan, Okinawa, Guam and Bali).

"Throughout the Pacific and Asia, as in North America and Africa, most of the action is on new projects. By contrast, in Europe there is a discernible trend to reuse, refurbish and reposition," said Corwin.

"We are beginning to see this kind of thinking in Hawaii, where mature resorts must remain competitive.

"Indication of the way Asia has embraced golf is reflected in our firm's almost 20 Asian golf-related projects in the planning stage, in China, Korea, Indonesia, Taiwan and Malaysia, our hottest ticket of the moment, with nine projects.

"WE SEE GOLF in its infancy in Mexico, where we are designing a golf clubhouse — Four Seasons Punta Mita, with a Robert Trent Jones Jr. course—near Puerto Vallarta. There
are twice as many golf courses in the state of Arizona as there are in all of Mexico; but the interest is definitely growing, and as their economy expands we expect Mexico to experience a growth in their golf industry.

"While the vast majority of our golf work is associated with resorts, we are also finding that civic and private country clubs are retaining their long-established interest in golf. For example, we have under construction a private golf club, part of a golf residential community called Broken Top, in Bend, Ore. In addition, many combined golf residential/resort projects are being planned in Asia.

"Major trends in clubhouse design are related to demand for excellence in design, the clubhouse's expanded role as hub for social activity on the property, environmental/cultural concerns and health consciousness.

CONTRIBUTING TO A prognosis of long-term health for the golf industry is golf's ability to attract the entire family.

The phenomenon of clubhouses becoming focal points in resort communities is illustrated by the increasing number of social activities which take place within. The golf course and golf clubhouse are so vital a part of new or renovated resort developments, they are—typically—designed before the hotel, as in Palm Hills Golf Clubhouse in Okinawa and Schloss Seltenheim Golf and Country Club in Austria.

"Another important trend, one tied to current resort design, is the trend toward market differentiation. Because a key motivation for travel is to experience places and resorts that are distinctly different from past experiences, one-of-a-kind golf courses and clubhouses are helping to differentiate resorts in the marketplace. In a sense, golf clubhouses are helping to create a project’s signature.

"REALISTICALLY," Corwin concludes, "the reason for golf's strong position in relationship to resorts is financial. With golf's worldwide growth in popularity and its ability to attract high usage and membership fees, a golf course can add tremendous economic value to a property. Also, when a developer initiates a golf project, membership fees can provide critical up-front money to help finance a development."

Golf Memberships Fund Clubhouse

Widely traveled, educated in the United States, and a businessperson with a keen concern for profit, Takakura corporation president Koichi Takakura had completed several successful real estate developments in Okinawa by the time he celebrated his 39th birthday. He had also been busy collecting art, writing poetry, studying gardens and quietly thinking about a signature project—something very special. As a worldly man of the late 1980s, he could hardly miss the significance of golf as a project for prestige and profit. Besides, he is himself a golf aficionado.

Combining idealism and pragmatism, he arrived at a concept, the first phase of which would be a golf-driven resort (Palm Hill) on a hillside overlooking Itoman City. With an 18-hole signature golf course, clubhouse, and hotel, this would be the precursor to an additional nine holes, botanical garden, residential home sites, a city and a university for the elderly.

It would all begin with the golf clubhouse.

It would really begin with a master plan and the phased marketing of golf memberships—which sold briskly in four phases to local Okinawans at approximately $50,000; $75,000; $100,000; and $150,000. Then, to mainland Japanese at $250,000.

The clubhouse would have to be commensurate with the club's membership fee structure—something outstanding.

—Mazeppa King Costa
Summer—and as kids and parents by the millions are pouring through the gates to Euro Disney, the Walt Disney Company’s newest theme park, they are simultaneously being exposed to the work of Hawaii’s hotel architects Wimberly Allison Tong & Goo. How’s that? Euro Disney encompasses a full-blown resort (Euro Disney Resort) as well as the iconic park (Euro Disneyland) presided over by Mickey Mouse and friends.

PHASE ONE of Euro Disney (which opened April 1992 in a Paris suburban area) includes six hotels, five of which are located around the man-made Lake Buena Vista in the resort component. Disney decided to position the sixth hotel as the literal entry of the park component, making it the first hotel built within a Disney park and intended to become part of the Dis-
Thus, walk through ground ticketing facilities, which ented 500-room Disneyland. Of-the-century American accommodations, the sixth hotel—the Disneyland Hotel—is positioned to serve as the actual gateway to Mickey's newest dominion and to mark the beginning of Main Street, U.S.A.

To enter Euro Disneyland, visitors walk through passageways beneath the public rooms and the most plush accommodations of the luxury-oriented 500-room Disneyland Hotel. Thus, the hotel bridges the gates and ticketing facilities, which are on the ground floor.

It was early in the programming process that Walt Disney Imagining decided to use a grand hotel as the gateway to Euro Disneyland Park and that it would represent a chapter from the turn of the century, fitting the larger story of Main Street, U.S.A. WAT&G architects, working closely with Walt Disney Imagining, were challenged by the "bridging" part of the program. They succeeded by designing most of the guest rooms into wings adjoining the main building, which is suspended above ground level to accommodate park entry passageways.

"Architects have come to me and said that they don't wish to be involved in thematic architecture. My reaction to that is to question the difference between working within an American Victorian 'theme' and working within a Post-Modernist 'theme.' Post-Modernism and Hi-Tech architecture are just as thematic as anything that is created for Euro Disneyland."

"Although visitors to theme parks are looking for fantasy, the fantasy has to be based on reality if it is to be effective. People need certain starting points to which they can relate before the elements of adventure and surprise can be successfully integrated within the experience as a whole. Our design team made every effort to ensure that the architecture of the Disneyland Hotel be an authentic reproduction of American Victorian. During the design process it is very easy to mix metaphors or misinterpret features, thereby producing something which is a travesty of the period.

"Architects have come to me and said that they don't wish to be involved in thematic architecture. My reaction to that is to question the difference between working within an American Victorian 'theme' and working within a Post-Modernist 'theme.' Post-Modernism and Hi-Tech architecture are just as thematic as anything that is created for Euro Disneyland."

"Unfortunately, a very narrow view which maintains that unless something is contemporary it is not worthy of serious architectural comment has had considerable influence over recent years. I believe that, regardless of whether an architect is working within a theme park, a tropical resort or the commercial district of a major city, the key to success rests in the ability to understand fully the culture within which one is working and to thereby create a building which expresses that culture authentically whilst remaining very contemporary in terms of its technical and functional capabilities."

The California Council/AIA, in awarding WAT&G an Honor Award for its "remarkable" design of the 900-room Grand Floridian Beach Resort at Walt Disney World in 1989, commended the firm for its solution of blending an era of 19th century charm and romance with 21st-century technology.

Mazeppa King Costa is a public relations consultant and writer.

HAVE ACOUSTICAL CEILINGS OR WALL APPLICATIONS?

TECTUM ACOUSTICAL CEILING & WALL PANELS

Let us help you solve your problems with Tectum

Tectum makes a wide range of products designed to meet your acoustical needs,
- Acoustical Walls & Ceilings
- Fabri Tough Wall Panels
- Roof Deck and Form Systems

2826 Ualena St.
Honolulu, HI 96819
Phone: 831-6060
Fax: 831-6069
Part II: Assessing the damage

This is Part II of a three-part article assessing Hurricane Iniki’s ravages on Kauai and offering personal observations and recommendations.

National and state agencies monitoring global weather patterns agree that their data support the increased likelihood of Iniki-type storms in the Pacific region. For example, according to data published earlier this year by the Hawaii Agricultural Statistics Service, “rainfall statewide is as much as 80 percent below normal ...”

In May, the National Weather Service El Niño/Southern Oscillation Diagnostic Advisory reported that: “tropical convection has been enhanced in the central Pacific; sea surface temperature (SST) anomalies increased in many sections of the eastern tropical Pacific, with the largest increase in the Niño 3 region (90-150W). SST anomalies greater than +1° Celsius observed over many sections are quite similar to those observed last year at this time.”

An experimental, ocean/atmospheric model forecast system under development at the National Meteorological Center projects that: “warmer than normal conditions will continue throughout the central and eastern tropical Pacific through August, 1993, and that warmer than normal SSTs contribute to greater than normal tropical storm activity in the southeastern North Pacific ...”

These reports suggest Hawaii could be hit by potentially disastrous storms any time during the hurricane season (June–November).

In Florida, Hurricane Andrew left undamaged, six very modest but well-built homes designed and constructed by Habitat for Humanity. On Kauai, approximately 14,350 homes were destroyed or damaged. A surprisingly
Our disappearing act

makes kitchens stand out.

It's not that we're shy about the appearance of our low-profile wall oven. In fact, we're proud of the way our low-profile ovens tend to fade into the woodwork, integrating seamlessly with even the most contemporary frameless cabinetry. Or smoothly complementing traditional kitchen decor.

In addition to clean, unobtrusive design, they also offer the dependable performance of GE advanced electronics. Precise temperature controls. Self-cleaning oven interiors and easy-clean exteriors. And our companion gas cooktop offers an innovative downdraft exhaust system that actually retracts when not in use.

We'd like to add that, while our flush wall ovens may do a disappearing act, our service never will. In fact, we offer an unmatched array of after-sale support services. Including the industry's largest network of factory service technicians. And the 24-hour-a-day GE Answer Center® service.

With GE, you'll get service that's truly outstanding.
In construction, it’s always one thing after another.

In the building trades things happen fast, and unforeseen problems always seem to pop up, one right after another. So it’s nice to know there’s one thing you can always count on. Tileco. We have the mass production speed and an inventory to keep your job on schedule. No matter how big it is.

Hawaii Manufacturers of Quality Concrete Blocks.

**TILECO INC.**

91-209 Hanua Street
Ewa Beach, Hawaii 96707

682-5737
high number, 1,183, were in the Princeville area. Most of the homes 100+ homes I assessed in the aftermath of Iniki were architecturally designed and engineered. Many were built by contractors. I began each damage assessment by viewing the wreckage, then asked survivors to relate what had occurred.

THE HORROR STORIES were similar in that each interview would begin by cursing the county building code and end in a teary-eyed tale of holding on to a toilet, or taking refuge in a bathtub under a mattress. All of them felt lucky to be alive. Most of the people who stayed home ended up in the bathroom after the rest of their house caved in.

Coconuts, tree limbs, cedar shakes, asphalt shingles and ceramic tiles became projectiles, impaling adjoining roofs, walls, doors and windows creating a domino effect of destruction. Much of the water damage to concrete hotels and condominiums occurred after glass sliding doors shattered and wind-driven rain entered the structures. Two inch T&G type kit homes racked like accordions, then collapsed. Roof rafters nailed to top plates with 8p nails flew off. Wall sections "shot" to concrete slabs simply separated. Many homes blew off their foundations.

I ASSESSED DAMAGE to a $1.2 million home located in the middle of a grassy field. The adobe tile roof was a mangled mess. The owner, a rock musician from Los Angeles, related that the tile vibrated at one pitch, the wood at another and the metal wire clips sounded like the string section. As the wood, tile and wire vibrated at their different pitches, they beat each other to death. The tile lost. I later asked owners of homes with tile roofs what they heard; all talked of strange sounds coming from the roof. Only one roof consistently survived without damage, the Celotex Presidential.

SOME HOMES WERE relatively undamaged. In each instance, hurricane ties were used on the rafters. I inspected a home, surrounded by collapsed houses, that suffered no damage other than that caused by flying debris from neighboring homes. This structure was tied from foundation to roof with hurricane straps, vented with louvered windows, framed with gang nailed trusses, and capped with an asphalt shingle roofing. The owner/designer/builder of this structure made the professionals look like amateurs.

Tightly sealed homes exploded as the atmospheric pressure differential (28.53 inches) affected these enclosed structures. I later used this damage assessment data and worked with Nick Huddleston, AIA, in designing a new housing model for Habitat for Humanity on Kauai.

Sam Monet, principal broker, is vice president, sales and marketing, Pacific Investors Realty Services, Inc.
Business is about people
Roofing Supplies

Over the past ten years, Debra and Ritchie Mudd, owners of Roofing Supply Inc. (RSI) have demonstrated that in business, sometimes "ignorance is bliss." If we knew then what we know today, we would not have had the courage to start RSI," says Debra, RSI's vice-president. "We learned as we went along, and grew with the business."

Their experience shaped RSI's unique business philosophy.

"Number crunching is not a driving force at RSI," explains Debra. "Business is about people—customers and employees. People are our most important asset. And we are not just saying that. We genuinely believe it."

RITCHIE AND DEBRA believe there is a correlation between their business success and the strong personal bonds with customers and employees.

"Business is not about MBA's and degrees—it's about customer service and customer needs," Debra says.

The company has grown from humble beginnings in a discarded 20-foot Matson container on an 8000-foot Sand Island yard in 1983 to a business employing more than 75 people in three locations—Oahu (95,000 square feet), Kauai (35,000 square feet) and Maui (20,000 square feet). RSI today carries the largest inventory of roofing supplies in the islands, representing every major roofing supply manufacturer in the United States.

WORKING ALONE, Ritchie and Debra kept the business solvent the first two years by working second jobs—Ritchie as a waiter and Debra as a registered nurse.

They learned every operation necessary to conduct business, including running a forklift. This proved to be invaluable in giving them a greater understanding and appreciation for the needs of employees and customers.

"Although the business is relatively large today," Ritchie, RSI's president, points out, "we run it as a small family business. We recognize family priorities and do our best to blend employee and business priorities in a positive way."

In dealing with employees, Ritchie and Debra believe in an open door policy; in fact, there are no doors. Their office space is like that of other employees.

"LUXURIOUS QUARTERS are not important. They do not reap benefits; our people do. Our relationship with employees is based on mutual respect. Ideally, it is a work relationship based on friendship. Ultimately, this friendship is reflected in day-to-day business. Our customers are number one and so are our employees."

Besides running the business, the couple maintains their "hands-on" managerial style and work alongside employees.

"Employees are our co-workers," comments Debra. "There are no big bosses; everybody's job is critical to our collective success."
A large share of earnings is reinvested, not in plush offices, but into the business and in employee benefits.

"WE PAY FOR continuing education and offer liberal leaves of absence and flexible work schedules to accommodate employees with families," Debra explains.

The couple has enormous respect for roofing subcontractors because they "have one of the most difficult, back-breaking and dangerous jobs in the world."

"A roof is a critical component in a home," Ritchie remarks. "If a roof leaks, subcontractors are on the spot, regardless of time of day or night. Selecting roofing materials is important. You get what you pay for. Fortunately, people invest in longer lasting, quality materials. Looks come with quality; however, quality alone won't keep rain out ... this is where reliable roofers come in."

THEIR CONTRIBUTIONS and accomplishments have been recognized. The company received the Pulama O'hana award from the Hawaii Community Services Council in 1991 for its support of the family in the workplace; the Environmental Award for Small Businesses in 1992; and the owners were named the Outstanding Small Business Persons of the Year for 1993 by the U.S. Small Business Administration.

The couple has two boys, Mozes, 7 and Maxx, 6.
A learning experience

Italian Communities

Nick Huddleston, AIA, spent the month of May on a farm in central Italy, visiting hill towns between Florence and Rome, with his family and several friends. This is his account of what he learned.

As an advocate of compact communities, mixed-use zoning and sensible road sizes, I looked forward to visiting Italian hill towns this spring. The trip surpassed my expectations. Italy, like England and Bali, surprised me with the extent and the beauty of its countryside. Villages surrounded by woods and farms are common in all three settings but the Italian countryside is unique in the dramatic siting of its towns, the coherence of its vernacular and formal architecture and the variety and elegance of its farmlands.

Study the background vignettes of Italian fields, woods and hill towns in religious paintings from the middle ages. Many painters were proud of the beauty of their towns and countryside and included them in their work. Much of that beauty remains today—picturesque villages are surrounded by olive groves, wheat fields as elegant as golf courses, fruit and nut orchards and wooded hills.

COURTYARD GARDENS, windowsill planters and the beautiful fields testify to the Italian love of gardening. Parasol pines planted along ridge lines and on hilltops complement groupings of Italian cypress and poplar trees to create a landscape of startling classical beauty.

COMPACT COMMUNITIES? Try a medieval hill town, or Rome for that matter. Both achieved high densities without high-rise buildings and before elevators. Hill towns pioneered the concept of the mega-structure that grew organically, preserving human scale and opening streets and squares to sunshine and convivial social intercourse.

The passeggiata, or promenade, is a major evening entertainment and the streets and squares are filled with pedestrians most of the day. The hill town's dense development and superior prospect leave the surrounding coun-

It's time for the daily passeggiata on the Piazza del Popolo in the small town of Todi, Italy.
Old villa overlooking Lago de Bolsena.

Garden street in Assisi.

A green field as seen from Assisi.
Small houses, small streets and small cars in the town of Orte.

A tryside open for agriculture and provide splendid views from the streets, courtyards and ramparts of the town.

ITALIAN TOWNS are small and walkable. A stroll of a mile or less will take you from the center of the historic district to its edge, even in Rome. The Piazza del Campo, the heart of Sienna and the setting for a world-famous horse race, is slightly smaller than the Costco parking lot in Salt Lake. The Roman Forum is two thirds the size of Ala Moana Shopping Center.

Streets from eight to 20 feet in width (building wall to building wall, not curb to curb) are common. These roadways accommodate parking, cars, trucks, bicycles, arm in arm pedestrians and baby carriages with no visible evidence of the carnage that our road designers seem to associate with narrow streets. Common sense and courtesy make it all work. Traffic is necessarily slow when the roadway is congested, and drivers and pedestrians look out for each other.

Access for emergency and service vehicle? Guess what—you can make small buses, garbage and fire trucks, delivery vehicles and concrete trucks. You don't even have to wait for the American auto industry to come to heel. They can all be ordered from European and Asian manufacturers today.

Mixed use? In Italian cities, small and large, a wealth of retail and artisan shops mix with residences, ristorante, coffee shops, bakeries and gelaterias, and fresh fruit and vegetable stores bring life to the street. Small carpenter or machinists shops along side streets add interest to neighborhoods.

MANY TOWNS HAVE their own local specialties, ranging from leather to chocolates, pastries, ceramics and iron work. The rich variety of shops is complemented by an essential smallness of scale. There are no Kmart's in Italian hill towns. Their size would be devastating.

Commuting? Many families live above or within easy walking distance of the businesses that afford them their livelihood. The national custom is to work in the morning, take a two-to three-hour break for the midday meal with family and friends, and perhaps a nap, followed by work into the early evening. The day is rounded out with a leisurely late-evening meal. The intimate proximity of restaurants, shops, residences and public squares make this civilized pattern of work, dining and social activity possible.

Siting and design? Italian towns are dramatically placed on the flanks and tops of hills, enhancing the beauty
of the land with compositions of warm tile roofs, masonry walls, green doors and shutters, warmly colored plaster, classical columns and mouldings, and arches, arches, arches.

Details occur in a great range of sizes in proportion and harmony with the buildings they adorn. Doors range from 5 to 20 feet or more in height with knobs, knockers, hinges, and the buildings they open to in proportion to one another. Stairs come in all shapes and sizes, many beautifully worn and uneven and without handrails. They frequently do not meet our code requirements, but they've served their purpose very nicely for centuries.

**THE ITALIAN LOVE OF FOOD,** gardens and social intercourse is admirably supported by the mix of uses and the physical arrangement of the hill town. Their love of fast cars is supported by the Autostrada. Italian freeways commonly have no more than two lanes in each direction, but the roadways are built for speed. Vehicles moving at over 100 m.p.h. are common, and slow traffic stays in the right lane.

**Great art and architecture?** Of course. The Pantheon, the Roman Forum, the Sistine Chapel and the Duomo in Firenze are wonderful. The Pieta is deeply moving, and St. Peters would make a really nice train station. The highlights rival the hill towns and the beauty of the countryside. But, the collective wisdom of millennia that shaped the Italian towns and countryside has more of relevance to teach us than the more familiar works of individual genius.

The Church and the Caesar's aren't what they used to be. The chances of receiving a commission to design the modern-day equivalent of the Forum or Santa Maria del Fiore are not great. The Campodoglio perhaps. But, if great commissions are scarce, there is no question that our influence on open space has dramatically increased.

**TRADITION AND NATIVE SKILL** shaped the Italian countryside slowly over the centuries, creating a land of exceptional beauty. With all due respect to the Gentry Companies, Schuler Homes and the Housing Finance and Development Corporation, whose collective impact on the shaping of open land rivals that of medieval popes, our current development patterns are less promising.

The only sense in which we are building for the ages is that the subdivision of our agricultural land into suburban house lots creates a pattern of land use that will far outlast the life and utility of the built environment that goes with it.

We need to move away from the exclusionary zoning and suburban sprawl that are eating up our open space and agricultural lands, and offering little amenity in return, and begin to look for better alternatives. Italy, with its compact and convivial towns and garden countryside, has much to teach us.

*Nick H. Huddleston, AIA, is an architect in independent practice.*
Cyril Lemmon, FAIA, Dead at 91

Cyril W. Lemmon, FAIA, founder of Architects Hawaii, Ltd., died June 10. He was 91. A leading post-World War II architect, Lemmon helped design the Hawaii State Capitol building, which received the Hawaiian Architectural Arts Award in 1987.

Among his architectural achievements are the Shriners Hospital for Crippled Children, the Oahu Country Club, the Waikiki-Kapahulu Library and the Sinclair Library at the University of Hawaii.

Lemmon’s contributions to the profession were recognized by his election to the AIA’s College of Fellows and the Royal Institute of British Architects.

Born in Kent, England, he moved to Hawaii in 1928 to work for architect C.W. Dickey.

After the war, Lemmon, who served as a lieutenant colonel in the Indian army, returned to Hawaii where, with Douglas Freeth, he founded a firm that quickly grew into Lemmon, Freeth, Haines & Jones (Architects Hawaii Ltd. today).

An accomplished painter, Lemmon has had watercolors purchased by the State Foundation on Culture and the Arts and exhibited his works widely throughout the islands.

He is survived by his wife, Rebecca; daughters Mrs. Richard Johnson and Mrs. Buck Welch of Honolulu; five grandchildren; and sister Marjorie Nickerson of Kula.

Breaking New Ground

“Breaking New Ground” will be the theme of the 37th annual BIA Parade of Homes, to be presented by the Building Industry Association of Hawaii (BIA) and Hawaii Association of Realtors® (HAR) weekends Saturday, Sept. 25, through Sunday, Oct. 10.

Interiors Expo Set

The Industry Foundation members of the American Society of Interior Designers-Hawaii Chapter, will sponsor the fourth annual Pacific Interiors Expo ’93 on Oct. 7, 1 to 8 p.m., at the Hawaii Prince Hotel in Waikiki.

This expo is open to the trades only. Call 396-8425 for additional information.

The Ancient Romans Had A Pretty Good Idea.

The Romans gave us the arch. It laid the foundation for modern architecture and has influenced generations of builders.

Now FrameTech brings to the building industry a great idea on how to build better homes in Hawaii. Through the use of light-gauge, galvanized metal framing systems, this cost efficient technology manufactures metal stud wall panels, floor joists, and roof trusses for any project - from affordable housing to high-rise building projects.

This advanced framing system provides:

- Faster completion time
- One day residential erection
- Superior strength
- Greater wind resistance
- Insurance savings
- Corrosion resistant
- Straight walls
- Flat ceilings
- Unbroken long runs
- Perfect arches & curves
- Less waste

And Eliminates:
- Termite damage
- Wet/dry rot
- Nail pops
- Rotting
- Twisting
- Warping leaks
- Price fluctuations
- Erratic delivery
- Light-gauge metal framing - A pretty good idea for today’s modern builder.

Architects, contractors, and individual home builders are encouraged to call us for more information at: (808) 847-2191 / FrameTech Inc., A Jackson Company / License #BC - 10545

8/93 Hawaii Architect 19
Kona Expo Set

The largest consumer expo in West Hawai‘i is back for the fifth year at the Kona Surf Convention Center. The two-day Big Island Home and Garden Show will be held Sept. 18 and 19. Admission is free.

HFA Holds Trade Show

The Hawaii Flooring Association will hold its flooring & Interiors ‘93 Trade Show Aug. 6, 10 a.m. to 5 p.m. in the Ala Moana Hotel’s ballroom. Admission is free and open to members of the industry only, including architects. For additional information call 732-2857.

Wood Promotion

In a move to promote Hawaiian-grown woods and educate the public about Hawaii’s forest industry, the Hawaii Forest Association (HFIA) is sponsoring the first “Woods of Hawaii” woodworker’s competition and exhibit, Sept. 8–12 at Ala Moana Center.
Time to Sign Up for Convention

There is still time to register for this year's state convention sponsored by the Hawaii State Council/AIA.

The two-day event, "Survival in the '90s," will be held Oct. 9 and 10 at the Kamehameha Schools.

Rates, which include lunch, refreshments and hosted reception, are $90 for AIA members; $60 for AIA Intern/Associate members; $10 for AIA students; $20 for AIA members emeritus; $60 for AIA Affiliate members; and $100 for non-members.

Featured speaker will be Joseph Esherick, FAIA, 1989 AIA Gold Medalist and founder of Esherick, Homsey, Dodge and Dairs, AIA firm of the year in 1986.

Other presenters include Dan Chun, AIA; Kurt Mitchell, AIA; Dennis Neeley, AIA; Evan Cruthers, AIA; Rob Hale, AIA; Alan Hall, AIA; Raymond Yeh, FAIA; and Francis Oda, AIA.

Convention chair Ted Garduque, AIA, said that the convention offers an opportunity to enhance "professional skills and learn something new." Contact the AIA office at 545-4242 for additional information.

New Laminate Products Shown at Exhibition

National Laminates, Inc. and WILSONART unveiled many new colors and patterns to the product lines at their sixth annual exhibition on recently at the Hawaii Prince Hotel.

Besides providing a preview of new colors and patterns for 1993, the expo addressed "Surfacing Synergy," the color coordination of interior areas using WILSONART with other product lines to form a total picture. A new collection of 12 unique laminate patterns called Pearlescent was introduced. These laminates, primarily for vertical applications, give the essence of jazz with an illusion of dimension, caused by the interplay of colors shifting with shadow, light and movement.

A new solid black "panther" and four new whites and neutrals were also added raising the WILSONART black and white collection to 10.

WILSONART's solid surfacing line "Gibraltar" also introduced 16 new colors and patterns, expanding the existing line to 32. The mirage series in taupe, khaki, fawn, light beige and hunter green adds a new dimension to the granites and at the same time offers users a wider selection.
FREE SEMINAR

Exclusively For: Architects, Associates and Specifiers

Fundamentals of Exterior Insulation and Finish Systems and Metal Framing

Date: August 26, 1993
Place: Honolulu Country Club
Time: 1:30 PM - 5:00 PM - Seminar
5:00 PM - 8:00 PM - Reception & Viewing of Displays

Call 839-6517 by August 12, 1993 For Reservations
At the Pacific Club

Members Meet the Media

The Public Relations Committee of the Honolulu Chapter/AIA hosted its annual public relations breakfast for members of the media July 7 at the Pacific Club.

Four presentations were made by AIA members following a welcome address by Honolulu Chapter/AIA President Kurt H. Mitchell, AIA.

H. Robert “Rob” Hale, AIA, immediate past president told the audience about the AIA’s “Hurricane Iniki Recovery Manual for Small Businesses and Homeowners.” He said over 5000 copies of this document have been distributed to make people aware of what can be done to protect homes from hurricanes in the future. Copies are available at the AIA office.

Nick Huddleston, AIA, discussed “Housing Hawaii,” a position paper on housing and urban design issues.

University of Hawaii’s dean W. H. Raymond Yeh, FAIA, indicated that long-term prospects for architects in Hawaii should be very good. He pointed out that China, the most populous nation in the world, is opening up for business, while other Asian countries are continuing their economic upswing. “Hawaii holds a strategic position with respect to these opportunities in the Pacific Rim and could play a pivotal role in this new era of architectural development in the region,” he said.

Glenn E. Mason, AIA, talked about the annual Honolulu Chapter/AIA design awards program which was instituted in 1958. He also announced winners of the 1993 awards program—nine projects selected by a jury from a field of 41 entries.

Members Asked to Participate

The International Conference of Building Officials (ICBO) is offering architects a unique opportunity to participate in the development of design standards for minimum plumbing fixture regulations. ICBO is requesting input in preparation for the 1994/95 edition of the Uniform Building Code.

Representatives from the national AIA Building Performance and Regulations Committee will attend the ICBO Annual Conference in Sacramento in mid-September to provide testimony on this and other critical codes and design standards issues.

The Honolulu Chapter/AIA Codes and Standards Committee will hold a meeting on this subject on Sept. 3. Members who would like to submit input and ideas can do so prior to this meeting or at the meeting.

Contact Andrew Yanovik, AIA, for additional information.

HC/AIA 1993 Awards Winners Recognized

Winners of the Honolulu Chapter/AIA 1993 Awards Program were recognized at the annual Design Awards Banquet, July 22, at the Hawaii Prince Hotel. Glenn E. Mason, AIA, Chair, Awards Committee, was emcee.

Nine projects were selected out of 41 entries by a jury of five. Winners were:

<table>
<thead>
<tr>
<th>Firm Name</th>
<th>Project Name</th>
<th>Award</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban Works, Inc.</td>
<td>Residence for the Umeno Family</td>
<td>Merit</td>
</tr>
<tr>
<td>Spencer Mason Architects</td>
<td>Hawaii’s Plantation Village</td>
<td>Excellence</td>
</tr>
<tr>
<td>Donald M. Shaw</td>
<td>Moiliili Community Center:</td>
<td>Excellence</td>
</tr>
<tr>
<td>architects Hawaii Ltd.</td>
<td>Multi-Purpose Building</td>
<td>Merit</td>
</tr>
<tr>
<td>John Hara Associates</td>
<td>Capitol Complex for the</td>
<td>Merit</td>
</tr>
<tr>
<td>INK Architects, Inc.</td>
<td>Federated States of Micronesia</td>
<td>Excellence</td>
</tr>
<tr>
<td>Group 70 International</td>
<td>WO International Center</td>
<td>Merit</td>
</tr>
<tr>
<td>Media Five</td>
<td>Townhouse Residence at the</td>
<td>Merit</td>
</tr>
<tr>
<td>Sam Chang Architects &amp;</td>
<td>The Pointe Club</td>
<td>Merit</td>
</tr>
<tr>
<td>Associates</td>
<td>Gran Deco Hotel &amp; Ski Resort</td>
<td>Merit</td>
</tr>
<tr>
<td></td>
<td>Honolulu Police Department</td>
<td>Merit</td>
</tr>
<tr>
<td></td>
<td>Headquarters</td>
<td></td>
</tr>
</tbody>
</table>

Judges this year included Edward W. Campbell, AIA, president, Hawaii Island Section/AIA, representing the Honolulu Chapter/AIA; Alan B. Clarke, AIA, president, Tongg, Clarke & Mechler, representing the Hawaii Chapter/American Society of Landscape Architects; Theodore E. Gardeau, AIA, president, Gardeau Architects; Fred W. Loesberg, AIA, representing the Maui Chapter/AIA; and W. H. Raymond Yeh, FAIA, dean, UHM School of Architecture.

Award winning entries will be featured in subsequent issues of Hawaii Architect.
Thousands of building professionals have relied on Honsador for basic framing packages, specialty products and knowledgeable assistance since 1935. And as your needs have grown, Honsador has responded with innovative, customized services like containerized orders, jobsite delivery, bonding and house packages.

When you get down to basics, Honsador offers you more.

- Truss Joists
- Lumber
- Drywall
- Siding
- Custom Orders
- Cedar
- Glulam Beams
- Doors
- Clears
- Roofing
- Mouldings
- Redwood
- MDO & HDO Plyforms

CALL 682-2011

MAUI
Ph: 877-5045 • Fax: 877-6571

KONA
Ph: 329-0738 • Fax: 326-2764

OAHU
Ph: 682-2011 • FAX: 682-5252

ADA | AMERICANS WITH DISABILITIES ACT

LOOK TO JBL TO HELP SOLVE YOUR BUILDING ACCESSIBILITY NEEDS.

We offer expert advice on lever locks, low-opening force door closers, low profile thresholds, automatic door operators and toilet room accessories.

These items are "readily achievable" and are a critical part of establishing "good faith" efforts toward "positive" compliance.

DEPEND ON JBL FOR GOOD ADVICE AND RELIABLE PRODUCTS.

JBL HAWAII, LTD.

531 WAIKAMILO ROAD • HONOLULU, HAWAII 96817
• PHONE 847-4021 • FAX 845-9638
M Partners, Inc. recently received national recognition for its design of the first school built in Kauai in 16 years. The new King Kaumualii’s Elementary school design was featured as one of 151 of the nation’s most outstanding new, renovated or planned educational facilities by American School and University, a monthly trade publication.

The school, located next to Peter Rayno Park, serves the Hanamaulu to Wailua region of East Kauai.

AM Partners worked with the community and the State Department of Accounting and General Services and the Department of Education in developing a master plan for the school, and then completed the architectural design of the campus buildings.

The design takes advantage of the prevailing trade winds. Because of the high rainfall on Kauai, covered walkways were built linking the buildings together to protect students during the rainy season.

The architecture relates to the character of the older plantation homes in the neighborhood. Pitched roofs, arcaded walkways and a earth-toned twelve-color paint palette for the exterior elevations all contributed to the contextual design. Low maintenance landscaping consists of lawn and ornamental trees flanking courtyards. The central courtyard can also be used for school assembly functions.

K. Shioi Construction Inc. in 1991 completed construction of the five two-story public classrooms in the first two phases of the project. Construction of the third and final phase of the project — the library, cafeteria and administration building — needs additional legislative funding.
Time for a face lift
Fort Street Mall

Fort Street Mall, in the heart of downtown Honolulu, is arguably the strip with the greatest mixture of uses in Honolulu. On its mauka end, a college campus, Hawaii Pacific University, stands in front of one of the state's oldest churches, the Cathedral of Our Lady of Peace. Along its four blocks are offices, shops ranging from jewelry to comic stand, fast food restaurants, two large department stores, a satellite city hall and the headquarters of Hawaii's financial giants.

Once one of Honolulu's principal streets, Fort Street Mall began life as a path for Hawaiians traveling to Nuuanu Valley through the Pali. By the late 1800's, the street had become the retail district of Honolulu, where the city's elite hitched their carriages and the rest came by mule train to shop for the latest items brought in by merchant ships.

FORT STREET FIRST BECAME a pedestrian path during the 1951 Aloha Week festivities. At that time, traffic congestion and lack of parking was causing a noticeable drop in sales for Fort Street merchants. As a solution, architects envisioned an open-air promenade to connect disparate shops and eateries from Beretania to Queen Street.

But it wasn't until February, 1969, that Fort Street was formally inaugurated as a pedestrian mall.

By the late 1980s, however, Fort Street Mall was succumbing to age. It was time for another face lift.

In 1991, the city's Department of Housing and Community Development selected PBR Hawaii for the renovation.

FROM THE INITIAL STAGES of developing a design concept for the mall, it was important that the improvements have a uniquely 'Old Hawaii' feel and character. We chose to replace most of the existing improvements and to construct a much simpler and more comfortable human-scaled environment for people to enjoy.

To invoke the flavor of old Honolulu, PBR used turn-of-the-century benches and iron light fixtures designed like Victorian-era gas lamps. A peaked copper roof design was used over sandblasted concrete phone kiosks, echoing the architecture of Honolulu's charming old buildings.

ORIGINALLY, PLANS CALLED FOR resurfacing with concrete. PBR instead recommended using concrete unit pavers laid out to look like the way streets were once paved with cobblestones. Aside from contributing to the project's aesthetics, concrete paver units come ready to install so there was no need to wait for curing concrete. They are very durable—each block is rated at 8,000 psi (pressure measurement) compared to the 3,000 psi for concrete. Pavers can be easily removed and replaced for underground utility improvements and repairs with little or no disturbance to the original pavement design.

To open up the mall, PBR eliminated the...
concrete heavy trellis ways and carefully placed seating areas and moveable concrete planters covered with colorful ground cover (impatiens, dwarf isova begonia and periwinkle) to create a pleasant mall environment. Tropical coconut palms predominate landscape. More than 80 palms and 60 medium-to-small canopy trees were installed by Island Landscape, Inc., including Hong Kong orchids, fiddlewood and shady environment.

"WE HOPE THE PUBLIC ENJOYS the beauty and openness of the new design," said Jim Turse, director of the City's Department of Housing and Community Development.

The $4 million project was completed in 2½ years. The general contractor for the project was Pan Pacific Construction, Inc., and the concrete unit paver system was installed by Ono Construction, Inc. Other design team members included Toft Moss Farrow Inc., electrical engineer; Sam O. Hirota, civil engineer; Richard Libby, structural engineer; Rider Hunt Construction Services, Ltd., and Architecture Plus, Inc., architect.

Stan Duncan, ASLA, and Russell Chung, ASLA, are principals, PBR.

**Students Receive National Awards**

University of Hawaii's students captured two of six national awards presented by the American Institute of Architecture Students (AIAS) at the June 1993 AIA Convention in Chicago.

The Chapter President Honor Award was presented to Puanani Maunu for showing all the attributes of good leadership "by creating positive connections with the student body, administration and the community."

The Student Research Honor Award, which recognizes individuals or teams of students in architecture programs who have exemplified outstanding merit in architectural research, was received by Alison E. Nakatani for Architecture and the Built Environment.
May marked the completion and debut of an exciting project designed to educate the students of Hawaii about architecture and the built environment. The state's newest traveling exhibition "Architecture & the Built Environment," is the result of a collaborative effort between the Hawaii State Department of Education (DOE) and the University of Hawaii School of Architecture. The exhibit is part of the DOE's Artmobile Program, which brings art to communities statewide in special exhibitions installed in large, bus-like vehicles.

One of the DOE's most innovative programs, first made possible by the State Legislature in 1969, the Artmobile has brought art exhibits to thousands of students throughout the state. The Artmobile is designed to provide Hawaii's young people opportunities to examine a wide range of creative works and to learn about the various contexts in which art processes occur. Wendie Liu, DOE Art Specialist who heads the Art Education Program, says that students and teachers throughout Hawaii have responded enthusiastically to the program's different thematic exhibits.

DOE CURRENTLY operates two artmobiles. A virtual museum and classroom on wheels, each artmobile is staffed by a professional teacher who conducts specialized lessons pertaining to the exhibits. In addition to the architecture exhibit, the Artmobile Program currently has another stimulating exhibit on "The Artistry and Tradition of Crafts."

"Architecture & the Built Environment" is the inaugural exhibit of the state's newest artmobile vehicle. It was designed and installed by University of Hawaii at Manoa (UHM) graduate student Alison Nakatani in partial fulfillment of the requirements for the degree of Master of Architecture, which she received this spring. She is presently working for John Hara Associates Inc.

THE PRODUCT OF MORE than a year's worth of research and design, the exhibit is an attempt to educate Hawaii's children about the built environment and how it affects them. It
The Waikiki Beautification Project started from the ground up, literally. From Kalakaua Avenue at Ala Moana clear down to the intersection of Kapahulu. 150,000 square feet of architect-specified Paver Tiles were laid in four-inch squares complementing Hawaii's sand and earth tones. In addition to looking beautiful, the tiles are skid-resistant, have a low moisture absorbency, and are extremely durable.

Phone 526-0467

General Contractor: Royal Contracting Co., Ltd.
Architect: Robert M. Fox, AIA
Developer: City & County of Honolulu
introduces students to the fundamentals of architecture and the built world which completely surrounds them, affects them physically, emotionally, and psychologically, and helps determine the quality of their lives. As Winston Churchill once said, "we shape our buildings, and afterwards our buildings shape us."

DESPITE THE FACT that the built environment affects our lives in such a pervasive and profound way, built environment education is relatively new to our schools. Consequently, most people are uncomfortable in making decisions that affect the environment. Current controversies in Hawaii regarding mass transit, the convention center, and the impending demolition of the S.M. Damon Building in downtown Honolulu clearly attest to this fact. Therefore, it is critical that students are introduced to environmental concepts so that they will be prepared to make intelligent, creative and sensitive choices in shaping the world around them. The current artmobile exhibit attempts to address this need by helping students understand the built environment and that they play an important role in determining its quality.

Working within the constraints of a space 7 ft. 4 in. x 29 ft. 9 in. x 7 ft. 4 in. high, Alison's imaginative design solution achieves a dramatic transformation of the vehicle's box-like interior through the introduction of a diagonal line of columns and a raised slate-finished floor that define circulation and modulate the space. The exhibit features a large open area for students to congregate, an overhead grid structure from which space defining elements can be hung, over 80 photographs of buildings and spaces located mostly in Hawaii, diagrammatic drawings, models of various geometric and structural forms, and interpretive text.

THE EXHIBIT IS ORGANIZED according to conceptual themes such as climate, geography, function, image, geometry, beauty, and structure—all within a primarily architectural context. While self-explanatory in nature, the exhibit is designed to function as an instructional environment to facilitate participatory lessons conducted by the artmobile teacher. Intended mainly for elementary school children, the exhibit will be seen by students on all major islands as it travels to public schools throughout the state over the next three years.

The comprehensive teachers' manual which accompanies the exhibit was written by Alison.

The exhibit and teachers' guide together comprise a major resource which has the potential to significantly enhance built environment education in Hawaii. Members of the Honolulu Chapter/AIA who have been involved for many years in the DOE's Architects-In-the-Schools program now can use the exhibit as a springboard for more outreach activities.

* Leighton Liu is associate professor and graduate chair, School of Architecture, UH-Manoa.
Imagine the possibilities of Sub-Zero. As the leader in built-in refrigeration, we offer you a complete line of 13 models to meet your needs. The design and flexibility of our over-and-under, side-by-side, all-freezer and all-refrigerator and undercounter models give you countless storage options. And the classic beauty of a Sub-Zero builds in beauty to your kitchen regardless of the look – traditional, contemporary, wood, stainless steel or whatever your choice.

Our award-winning design, performance and skilled craftsmanship are backed by the best warranty in the business – the 12-Year Sub-Zero Protection Plan.

Experience the beauty, quality and performance of Sub-Zero.
Experience the Sub-Zero difference.

Visit Our Showroom at
1130 No. Nimitz Hwy., A-144
(Under the long, red awning)
Phone: (808) 526-0599
Top it with Dimondek®
the ideal roofing for Hawaii
A time-tested, architecturally versatile, efficient and practical system

JORGENSEN STEEL & ALUMINUM
91-104 Kalaeloa Boulevard, Ewa Beach, Hawaii 96707
Phone (808) 682-2020, Neighbor Islands 1-800-352-3612