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Builder

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THE ULTIMATE FAMILY HOME 2004

How do you accommodate today's families? Give them everything they want.

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THE NEW AMERICAN HOME 2004



WATERFRONT WONDER: Nestled on a lakeside lot, the loft-style, tri-level house presents a unique and interesting elevation among other custom homes in the neighborhood.

BUILDER® and the NAHB bring the urban loft to the cul-de-sac with a contemporary, eminently flexible house for affluent buyers and their ever-changing lifestyle needs. BY RICH BINSACCA

PHOTOGRAPHS BY JAMES E. WILSON

TIME WAS WHEN CUSTOM HOMES WERE JUST THAT: custom. Homeowners, with their architects and builders, prided themselves on being different and distinctive by crafting a home to fit their lifestyles instead of the CC&Rs (covenants, conditions, and restrictions).

But drive through just about any recently developed custom neighborhood these days and all of the houses look about the same. No doubt there's a certain security to that trend—that if no one is too edgy then everyone is safe from suffering the plagues of a pink elephant. But it can make for an uninspiring streetscape ... as well as for homes that dictate a lifestyle rather than the other way around.

For the most part, the homes inside Beach View Estates, the custom section of the Lakes at West Sahara in Las Vegas, maintain the status quo: hulking structures in traditional styles, finishes, and detailing. Nice, but nothing really to hold your interest, even to a custom home neophyte. And while you can't argue with waterfront lots within 15 minutes of The Strip, serviced by one of the city's few true arterials, the neighborhood lacks an excitement and vitality—a death-knell in a city like Las Vegas.

That is, until a 5,180-square-foot testament to what custom homes are meant to be (and might be again) sprouted up on one of the few remaining lakeside lots just inside the guard gate. It's The New American Home (TNAH) 2004, a concrete and copper cornucopia of advanced (yet marketable) lifestyle, comfort, construction, detailing, and design ideas.

If at first glance The New American Home's lack of dentil moldings and second-story dormers appears to belie its moniker, you only need look a bit closer to see how it truly earns that distinction ... perhaps more so than any of its 20 predecessors.

It is, of course, a home—in this case, a loft structure seeking to attract a narrow niche of affluent and sophisticated empty-nesters and never-nesters who value different over dull. It is also decidedly American, assuming you define that term as a melting pot of international influences stirred up into a unique expression.

But it is mostly new. The loft concept is new to the suburban, single-family home vernacular. By successfully employing innovative structural materials, the project offers new hope to builders struggling to deliver lasting quality in shortened cycle times. Presented as more of a blueprint than a strict layout of rooms and spaces, the house puts forth the neo-novel idea of letting the owners decide how to use it. As a departure from the norm, from the street and throughout its three levels (including a basement), TNAH 2004 provides builders with a new marketing angle to capture a growing number of well-heeled yet young-minded buyers.

(see page 164)

EASY ACCESS: Clean lines and open spaces afforded by the loft concept enable long sightlines and access through the main level and out to the vast courtyard.





ABOUT THE

Celebrating its 21st year in conjunction with the annual International Builders' Show, The New American Home program is a partnership between Builder and the NAHB's Supplier 100, facilitated by a task force including the partners, a hand-picked design/build team, and building product manufacturers. A for-sale home constructed by a local builder, Merlin Contracting & Developing, The



THE PROGRAM

New American Home presents a collection of design ideas, products, and systems that building industry professionals are encouraged to apply in the homes they design, build, and sell. The 2004 house will debut and be open for free guided tours during the International Builders' Show. See page 186 for additional details and a list of valued sponsors and contributors.

THE FLOOR PLAN: NEW WAYS TO DESIGN

The beauty of the loft is its flexibility and simplicity, presenting a blank slate for a multitude of uses and interior design approaches. Among the major rooms of The New American Home 2004, only the kitchen and master suite have dedicated or obvious purposes. The remaining spaces can be finished and furnished to accommodate the owner's passions and lifestyle needs ... almost at whim and especially as they change over time.

1. MULTIPURPOSE ROOM:

Whether arranged as a traditional living/dining area, fashioned as a library/study, or used as a workshop or studio space (see page 168), this large, open room exemplifies the value of a loft design.

2. LOWER-LEVEL ENTERTAINMENT:

In a world of shrinking lot sizes, the house locates the majority of a modern luxury home's perks in a well-lit walkout (see page 174), enabling adequate room for everyday spaces above grade.

3. UPPER-LEVEL LUXURY:

In addition to an appropriately opulent master suite, the upper level (see page 172) features a multi-use area as well as generous terrace spaces for private and public pursuits.

4. OUTDOOR EXCITEMENT:

Every level opens to a terrace or patio, including a waterfront dock, entry courtyard, and walkout from the basement level (see page 178).

5. QUIRKS: No true custom home would be complete without some quirks—in this case sophisticated, thoughtful quirks—including a drought-tolerant succulent garden in the basement light well; an art gallery; an elevator; a jetted outdoor tub on the master suite terrace; and copper just about everywhere you look (see page 178).



SECOND FLOOR



FIRST FLOOR



LOWER FLOOR

NEW WAYS TO LIVE

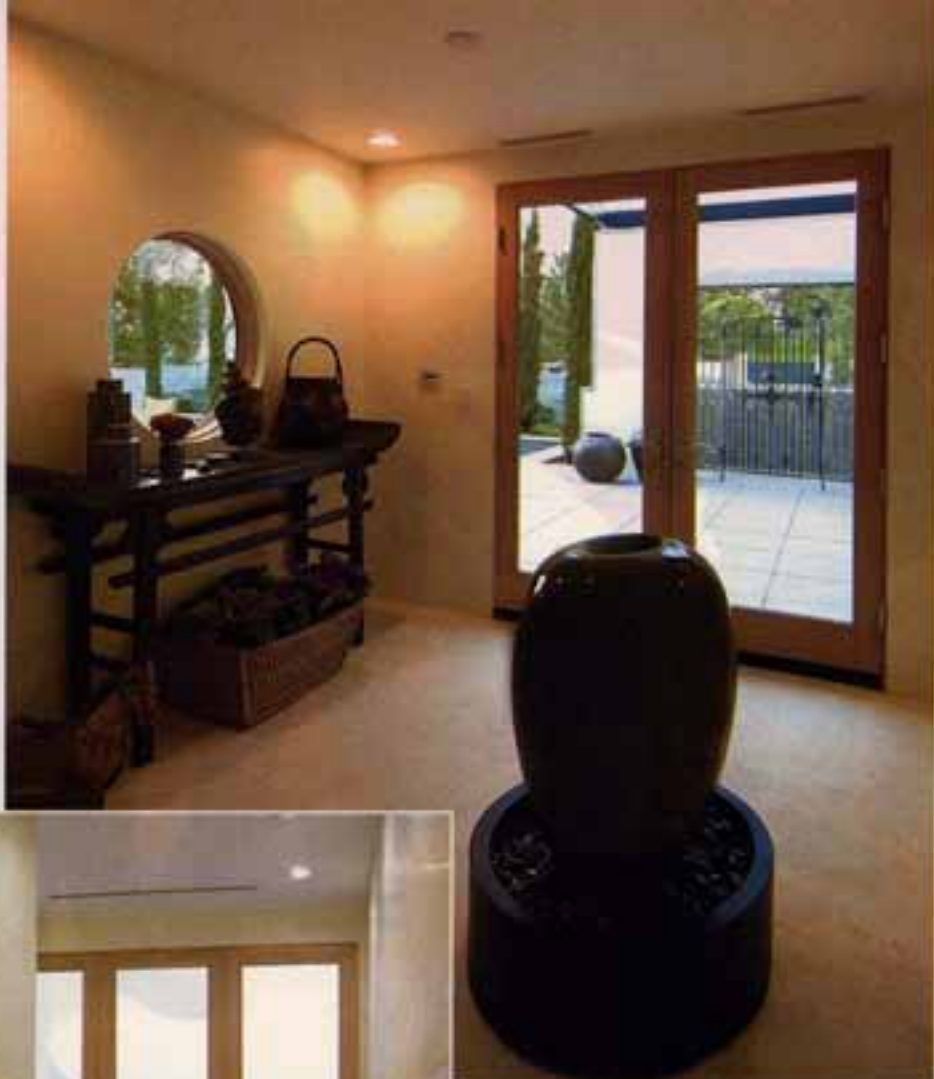
"IT'S IN MY GENES TO MAKE THINGS simple," says architectural consultant W.A. "Lex" van Straten, principal of Food for Buildings in the Netherlands, who brought the loft concept to the project. "For me, less is more, not more is better."

The loft presents clean and contemporary design and finishes. From its stainless steel appliances and flush maple cabinets in the kitchen right down to its colored concrete floors and welded steel staircases, TNAH 2004 offers a simple, elegant template for the owners. "A homeowner's interests and activities change all the time, but houses have not allowed or can't be adapted to meet those changes," says van Straten. "The loft allows them to move into a house with many possible uses over time."

That flexibility of use, he says, translates to long-term housing durability. If you can change the home's functionality to match interests and needs over time, then the longer the service life of the home. "In the West, we don't think what we build [today] will or can be around in a hundred years," says builder Bart Jones, vice president of Merlin Contracting & Developing, in Las Vegas. "That attitude is changing, and the loft allows infinite uses so the owners can age in place."

An elevator serving all three levels and full secondary suites in the home's walk-out basement, not to mention the home's concrete and steel structural elements and finishes, extend that expanded definition of durability even further.

The loft layout also brings an urban vitality to a suburban environment, a welcome alternative to cul-de-sac living. "It's another housing option for the suburbs," says van Straten. "It's a new choice for that kind of setting." (see page 166)



ELEGANT ENTRY: Instead of wowing visitors with volume, the formal entry (above) establishes an elegant tone for the house.



GARDEN DELIGHT: A succulent garden in the basement light well anchors the gallery behind the lower-level suites; the walkout accessed from both suites, as well as the stairwell to the main level, negates the light well as a necessary egress.

Suspended Pavers

PRODUCT SPOTLIGHT

Like a suspended ceiling, the 2-foot-square pavers on the home's extensive entry courtyard are a façade—in this case, a durable, attractive surface over a sloped concrete pad that drains water away from the house. Resting level on adjustable pedestals at every corner, the pavers are dry-set so that rainwater or runoff drains through the joints and onto the sloping pad below. The removable, interlocking, and weather-resistant pedestals can be set on any structural system, allowing fast and simple installation of the concrete pavers, even over a wood frame. Pavers by Stepstone (Circle no. 174); pedestals by Applan Way Sales (Circle no. 175).





NEW WAYS TO COOK

CONSISTENT WITH THE LOFT concept in its layout and space efficiency, the home's galley kitchen offers accessibility and openness to other rooms and the outdoors while also offering lessons in space planning and storage applicable to any housing type.

The long island that forms the galley, for instance, is necessarily multifunctional, with a non-porous, quartz-based counter balanced by a restaurant-quality stainless steel sink and fittings. The low and lean island presents no visual barrier into and from the kitchen—a trademark of the loft concept—while maintaining maximum accessibility from nearby rooms and especially the main terrace (or entry courtyard), where outdoor meals and gatherings are encouraged through a series of three, 9-foot-tall patio doors.

The kitchen's efficiency is extended by



the mosaic tile hearth servicing the multipurpose room a half-level down (see page 168), the top of which provides a deep buffet surface for a casual eating area. Meanwhile, a butler's pantry is tucked behind the elevator, partially concealing full-height storage for long- and short-term needs and a prep area featuring a

BARRIER-FREE: The efficient but well-appointed kitchen (above) hides its utility without blocking views or hindering access to the casual dining area (left) and spaces beyond. A butler's pantry to the left of the refrigerator (out of frame) provides additional storage.

GALLEY STYLE: The galley kitchen (right) packs a lot of punch, with a wider passage and the latest in appliances, cabinets, and plumbing fixtures combine to create a contemporary—yet comfortable—feel.

wine chiller and counter space with an appliance garage.

All of these elements combine to create an elegant, if unobtrusive, kitchen—one that focuses more on efficient function and clean, simple finishes than a dramatic first impression that eventually fizzles from lack of practicality.



Kitchen Help

- A full line of stainless steel appliances from KitchenAid supports the clean, contemporary feel of the loft's galley kitchen and butler's pantry. Circle no. 176.
- The granite-look countertop is actually a quartz-based solid surface from DuPont Zodiaq, specified in a Storm Grey that offsets both the stainless steel appliances and accessories, as well as the maple cabinets. Circle no. 177.
- Flush-front maple cabinets from Armstrong deliver a warming, natural effect in the kitchen and butler's pantry. Circle no. 178.
- The dual-basin, stainless steel sink from Kohler extends along the countertop for easy cleanup and long-term durability, and is serviced by a variety of fittings, including a commercial-grade, pull-down spray nozzle. Circle no. 179.
- Recessed lighting fixtures by Nora Lighting feature a combination of standard-voltage, low-voltage, and compact fluorescent fixtures with contemporary trim finishes. Circle no. 180.
- In-Sink-Erator supplied food waste disposers and instant hot water dispensers for the kitchen, as well as in other areas inside and out. Circle no. 181.



NEW WAYS TO **USE SPACE**

ON ONE OF THE INITIAL iterations of the floor plan, the large, high-volumed space located a half-level down from the entry and kitchen was labeled the "everything room." Truth is, no one really knew what to call it ... which underscores its value as an eminently flexible space.

Interior merchandisers Jiun Ho and Allisane Frew viewed the room as a blank slate from which they could furnish and style a variety of uses. "You can bring in so many different things," says Jiun, a globally renowned interiors, furniture, and lighting designer based in San Francisco. "It makes it easier to transform

the house, versus the house dictating how you live."

Playing off the "chameleon" label attached to the room by Frew, owner of Source Française, an antiques dealer and interior merchandiser in Oregon House, Calif., the room was merchandised in three vignettes to illustrate its versatility: as a dining room (above), as a studio (opposite, below), and as a living room (opposite, above). And more uses are possible.

The room extends its use even further by opening onto the waterfront dock area through a trio of 9-foot-tall patio doors. A connection with the exterior is further established by the northeast wall of the room, which replicates the concrete-washed stone finish of the outside walls.

Marta Borsanyi, principal of The Concord Group, a housing market research

DINING DOWN: The multipurpose room can easily accommodate a casual dining arrangement, serviced by the outdoor kitchen on the dock, as well as the kitchen a half-level above.

consultant in Newport, Calif., and the design/build team anticipate that such flexibility will be the next round of evolution in housing customization of production homes. "There's no such thing as a 'mass market' anymore," says Borsanyi. "Every [consumer] product, from computers to cars and clothing, is changing styles more frequently."

Housing design is a bit behind that curve, she says, but it is catching up as home buyers in nearly every segment and market put more value on being able to manipulate spaces instead of spaces manipulating them.



LIVING LARGE: A more traditional use for this area would be a living room, though the arrangement of furniture could easily be expanded or supplemented by other types of furnishings depending on specific entertainment needs.



SPACIOUS STUDIO: For the target market of active and affluent couples, the multipurpose room might well serve as a studio, with ample space and light, but also some separation from the rest of the house.

Multipurpose Room

- Mosaic ceramic tiles, designed by Moberg Fireplaces (Circle no. 182) and supplied by Daltile (Circle no. 183), finish the hearth, which contains a high-definition, flat-screen television from Pioneer (Circle no. 184) and a prebuilt gas firebox from Lennox Industries (Circle no. 185). Lennox also supplied the outdoor fireplace on the dock (not pictured).
- Windows and out-swing patio doors designed and supplied by Loewen deliver extensive light to the entire main floor, and specifically the multipurpose room. The

clean, contemporary lines of the windows and doors maximize views of the basement's patio/garden, the entry courtyard, and the dock area ... not to mention spectacular sunsets and starry evenings. Circle no. 186.

- Stair risers and upper-level floors are a commercial-grade engineered hardwood in umber brown ash from Armstrong. Circle no. 187.
- Area rugs by Shaw Industries adorn several rooms in the house, softening the concrete floors. Circle no. 188.



NEW WAYS TO RETREAT

THOUGH STILL FIRMLY GROUNDED in the loft concept, the upper level presents a transition into more intimacy and privacy. Specifically, the master bedroom resides on this floor, affording the owners a retreat from the wide-open spaces and shared functions of the main floor and the bustle of entertainment options on the lower level.

Master suite retreats are nothing new to mainstream suburban housing, of course, and are legendary in their grandeur in today's custom homes. But this one is distinctive for downplaying size in favor of sizzle and for extending a bit of playfulness even when no one but the owners are looking.

Case in point: One of the two jetted tubs in the bathroom sits on the open terrace, partially shielded by copper-clad louvers on the balcony and protected by a deep eave above. "What we heard from

potential buyers of this house was to make it fun," says Borsanyi. "They wanted things open and were less concerned with privacy."

The master suite enjoys a bit more space across the stair landing. There, the flexibility of the loft design returns with an open area that can be used as an easily accessible spa/gym, comfortable lounge, or home office for the owners. It could also serve more public uses, such as a family room or an entertainment area for a smaller number of guests, especially with another deep terrace and hot tub just a few steps away.

BATHED IN LUXURY: In addition to a generous pair of furniture-quality vanities, the master bathroom features a pair of jetted tubs: one on the private terrace and another accessible from both the bedroom and the bathroom.

Like many areas of the house, says van Straten, this one allows the owners to develop and alter spaces as they want or need, even over the course of a day. "If a space is good, you can do almost anything with it."

PRODUCT SPOTLIGHT

LiftSlide Door System

The first time you see the LiftSlide door system literally erase an entire corner of the house between the upper-level spa and the northwest terrace, you think it might be an illusion. Closed, the doors look like a fixed window wall, with a slight pull, they slide apart on a hidden track set into the floor

and ceiling, exposing a full-height, 9-foot-wide frameless opening that exemplifies the easy and intentional indoor/outdoor relationships found throughout the home. The system features a multi-point locking system that not only provides safety, but is weathertight. Weep tubes help direct water away from the tracks. The doors' metal-clad, Douglas fir frame and their insulated glass provide



thermal efficiency. Loewen. Circle no. 180.



SLEEP TIGHT: Though small compared with other custom homes, the master bedroom is no less luxurious, with an in-wall fireplace and plasma TV, as well as a private terrace and a decked-out, walk-in closet.



Master Suite and Bath

- An extensive master suite closet, custom furnished by California Closet Co. (Circle no. 190), incorporates the Personal Valet from Whirlpool (Circle no. 191), among other space-efficient, if luxurious, storage options.
- A custom-designed gas fireplace from Moberg Fireplaces, set into the wall of the master bedroom, features a soapstone firebox and a metal chimney. Circle no. 192.
- A flat-screen, high-definition television from

Pioneer, set on the opposite wall from the fireplace, gives the owners a "dual hearth" and can be viewed from both the bed and the bathtub. Circle no. 193.

- The entire master suite was outfitted with fixtures and fittings from Kohler, most dramatically by the twin Cleo jetted tubs at the terrace end of the bathroom. Circle no. 194.
- Flush ash interior doors from Masonite complement the contemporary design of the home. Circle no. 195.

TRIPLE DUTY: The upper level features more flexible space for a home gym (left), casual family room (center), or home office (right), among other functions to suit the owners' lifestyle needs.



NEW WAYS TO **EXPAND** **FOOTAGE**

HEAR THE WORD "BASEMENT" AND images of a light-filled art gallery, generous walkout patio, and multiple entertainment and personal passion spaces are probably the last to leap to mind. But with lot sizes shrinking—even for seven-figure custom homes—folks aren't willing to sacrifice their home theaters and wine rooms without exploring some radical options.

For a growing number of wealthy desert-dwellers, the basement is the perfect antidote ... provided it doesn't look or feel anything like a basement. "The loft design and a basement are almost contradictory," says Borsanyi, "unless it's done this way."

"This way" is accomplished by throwing plenty of natural light below grade, from the open risers of the staircase (angled to gain exposure from the west-facing windows and patio doors on the main level), to

SWEET SUITES: The mirror-image, lower-level suites (one shown above, bath at right) offer the owners myriad possibilities, from guest bedrooms to a game room, home office, yoga room/gym, or art studio. Each suite provides access to a generous walk-out patio and the waterfront.

a generous light well at the end of the gallery and most dramatically from a deep patio garden walk-out from both bedroom suites that accesses the waterfront dock area with a wide set of concrete steps.

The two suites are, in fact, yet another example of the loft's flexibility-as-durability concept. With respect to the target market of empty- and never-nesters, the two-story distance between the master and secondary



bedrooms indicates, at best, truly private guest or in-law quarters more so than kids' rooms; more likely, even those functions will share space with an owner's office or studio, game or billiard room, quiet hobby



space, home gym (especially with a dedicated full bath and outdoor access), or any number of uses depending on what the occupants need at any given time.

But that's only half the basement. The other side is pure entertainment space, including a fully equipped (if modestly scaled) home theater, extensive wine cellar with adjacent wet bar, powder room, and an accessible, well-equipped utility room housing everything from the laundry equipment to a jetted sink, Web-enabled home controls, and dual sump pumps (just in case). "Putting these functions below grade allows the owners to get the living spaces they want above grade," says builder Bart Jones. "It's a fairly inexpensive way to add footage." (see page 176)



RACK IT: A basement offers the perfect setting for a home wine cellar (above), providing the stability, climate control, and other critical conditions for optimum storage; a wet bar (left) serves the cellar for easy access to the wine and the other basement activities.



Basement Specials

- The residential elevator, supplied by American Access Systems, enables owners to age in place and still enjoy all three levels of the house. Circle no. 196.
- The wine storage system designed by Apex Saunas & Wine Cellars offers wine enthusiasts and collectors extensive storage racks with curved corners and built-in display lighting as well as climate control. Circle no. 197.
- The wine room also features a new overhead fixture from Boyd Lighting. Circle no. 198.
- The wet bar is fully outfitted with an undercounter refrigerator from Whirlpool (Circle no. 199), a KitchenAid microwave oven (Circle no. 974), and a sink and faucet from Kohler (Circle no. 975).
- The 12-by-15-foot home theatre features a Stewart film screen (Circle no. 976), a ceiling-mounted Panasonic projector (Circle no. 977), and Sonance speakers (Circle no. 978).
- The utility room lives up to its name, with Whirlpool's Duet-brand laundry equipment, ironing center, and jetted (yes, jetted) sink (Circle no. 979); Lutron Electronics home control system (Circle no. 980); and a structured wiring system provided by Cutler-Hammer (Circle no. 981), part of a comprehensive electrical package designed and supplied by Eaton Electrical (Circle no. 982).
- The home is serviced by high-efficiency, flame-retardant gas water heaters from A.O. Smith. Circle no. 983.
- To ensure the most efficient use of lighting in the basement, General Electric provided calculations and supplied a variety of bulbs, including halogen and compact fluorescent. Circle no. 984.
- Climate control devices from Honeywell enable the owners to manipulate the zoned HVAC system to save energy and optimize indoor comfort and health. Circle no. 985.



THEATER FOR TWO: A windowless, well-insulated, and quiet basement is an ideal space for a home theater (above and left); its intimate design is well-suited to the needs of the owners.



GALLERY WALK: A potentially dark hallway behind the basement bedroom suites is transformed into an interesting art gallery; a light well at one end features access to a succulent garden.

(see page 178)

NEW WAYS TO LIVE OUTDOORS

UNTIL YOU STEP ONTO THE TERRACES flanking the upper level of TNAH 2004, it's difficult to imagine the value of the outdoor spaces they provide. Thanks in large part to an innovative structural system (see page 180), the terraces enjoy deep, copper-cladded eaves over extensive areas that afford three-sided views and luxurious spaces few of the tacked-on balconies of even the largest custom homes can match.

The vast entry courtyard is multifunctional, serving as a greeting area for the foyer, outdoor party room and dining area (given its access to the kitchen), and a place to simply relax—complete with a glass lookout through an otherwise solid wall to the waterfront. It also features a pool, where exercise can mingle with reflection, as more glass panels at the south end of the pool deck provide views of the lake below.

The dock area provides the most function among the outdoor spaces. Even with a custom-made, steel-framed surround for the gas-fired kitchen and grill (complete with electrical service for small appliances), and a gas fireplace across the way to take the chill off the desert night, the dock area is still large enough for a small party of furniture. Meanwhile, the garden patio walk-out from the twin basement suites delivers a distinctly urban feel ... but with the calm and quiet of the suburbs.

For all of the outdoor spaces, the design/build team sought to provide easy and multiple points of access, take advantage of the spaces provided by the structural systems and the waterfront setting, and create areas of distinction. "I think every house should have features that make it different from what's standard," says van Straten, noting examples such as the tub on the master suite terrace, one of many blurred lines between the indoor and outdoor spaces, finishes, and functions.



INVITING ENTRY: A generous courtyard (above) extends the formal entry (left, out of view) and provides access directly into the kitchen and living areas through a series of patio doors, as well as views to the waterfront.



PRODUCT SPOTLIGHT

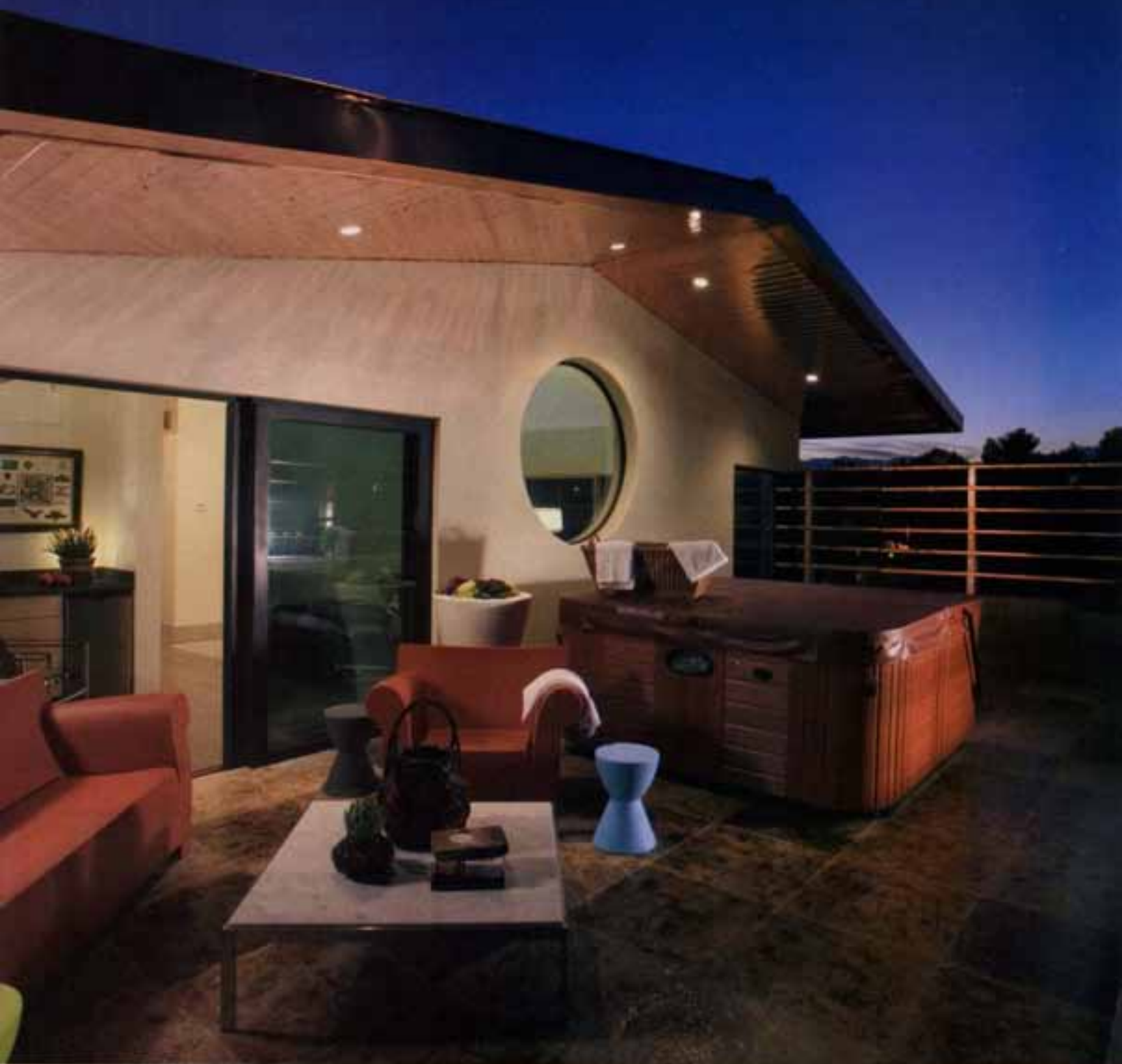
Copper

If its loft design and the clean lines created by its concrete structure weren't enough, the generous use of copper for the roof and terrace railings mark the home as a truly custom project. While the standing-seam copper roof delivers a thermal benefit in addition to its dramatic aesthetics, the copper "louvers" atop the terrace walls add a measure of privacy without completely blocking views. Clad over the vertical steel

posts extended through the structure and welded horizontally between them and as a structural cap, the fixed copper louvers provide a transition between the mass of the concrete walls and the open sky. Copper Development Association. Circle no. 996.



PHOTO: MARK O'NEILL PHOTOGRAPHICS



GRAND SPA: The extensive terrace off the upper retreat area has plenty of room for a self-contained hot tub, as well as ample furniture and access to a wet bar just inside the lift-slide corner door.

PRODUCT SPECS

Outdoor Amenities

- The freestanding hot tub from Hot Spring rests on the upper level balcony over the garage. Circle no. 987.
- A gas barbecue from Lynx Grills features a custom surround to create an efficient outdoor kitchen. Circle no. 888.
- More than 18,000 different cuts of stone

veneer from Old Castle/APG West (Circle no. 989), washed with a thin layer of concrete from Bomanite (Circle no. 990), grace the home's exterior (and some interior) walls.

- Glass panels from Excel Glass are set into the pool and entry decks to provide views to the waterfront. Circle no. 991.

BOOM BOX: The ICF perimeter walls create a self-insulated concrete structural shell that affords maximum flexibility in the interior layout.



NEW WAYS TO BUILD

THE NEW AMERICAN HOME 2004 was pitched to the builder as a concrete home. But the suggestion to use insulated concrete forms (ICFs) was a new wrinkle that required Merlin Contracting & Developing to research whether the foam forms would pass muster as a reliable building system and meet with the local building inspector's approval.

In fact, the builder is now solidly sold on using ICFs on future projects ... and even convinced his concrete sub to switch once he saw its efficiency in action. "It took one super and a laborer just 25 minutes to set one course, including steel, of the [2,000-square-foot] basement footprint," says Steven Jones, founder and president of Merlin.

Already on a shorter-than-normal

schedule to complete the home, the labor-saving virtues of ICFs enabled the walls to rise quickly while also creating an open shell, which allowed maximum flexibility in room sizes and layout and a full-span, recycled steel roof frame.

The ICFs also eliminated the plate line, an inherently problematic transition between concrete foundation walls and wood or steel framing, thus significantly reducing thermal loss. The self-insulated concrete, meanwhile, helped boost the overall efficiency of the exterior walls' thermal mass to R-50 without requiring any extra insulation. "It was 10 degrees cooler in the basement area even before we had the windows in," says Bart Jones, noting that ICFs also result in a deeper, straighter wall structure than he can hope for (or even afford) with sticks in a desert climate.

The innovative techniques didn't stop there, however. The design/build team also specified structural insulated panels (SIPs) for the roof, with the pre-insulated, orient-

ed strand board-faced sections set between recycled steel girders of the roof frame—a process that took exactly one day to complete and was the only way to create the deep eaves over the upper level terraces. Light-gauge steel framing and a glass-mat, mold-resistant wall board complete the interior walls, making TNAH an example of forward-thinking—if not yet mainstream—structural materials.

Those systems, among other construction innovations featured in the house, also tie into van Straten's vision for the loft as a viable design and building option for more flexible and durable production housing. "The only way to combine the loft design with efficient construction is with industrialized housing techniques and systems," van Straten says, such as ICFs and SIPs. "We're not trying to change the world [with this house], but to build an awareness of materials and systems that address issues of depleted resources, durability, and longer life-cycle."



STEEL HERE: Structural and light-gauge steel framing complement the straight lines and efficiencies of the ICF walls; factory-built chases in the webs enable mechanical runs without extra framing, while also reducing mass, weight, and raw materials.



PANEL APPROACH: SIP roof panels were installed in one day, securing easily to the insulated structural steel roof beams and completing the thermally efficient shell for the home.

(see page 182)

PRODUCT SPECS

Building Site

- Mold-resistant wallboard from G-P Gypsum uses a glass mat face instead of paper to impede mold growth. Circle no. 992.
- Light-gauge steel framing, sponsored by the Steel Framing Alliance, delivers straight walls, reducing service callbacks. Circle no. 993.
- Building America's IBACOS Consortium provided design consulting and energy analysis services toward achieving greater

energy efficiency. The home achieved a home energy rating system (HERS) score of 90, thus qualifying as an Energy Star-rated home, and will use 46 percent less energy for space heating and cooling, hot water, and lighting than the builder's standard home. Circle no. 994.

- Structural framing connectors from Simpson Strong-Tie Co. boost seismic and wind tolerances. Circle no. 995.

PRODUCT SPOTLIGHT

ICFs

In addition to creating perfect walls, lessening cycle time and labor costs, boosting energy efficiency, delivering built-in seismic qualities, and providing a solid, durable, and abundantly flexible exterior shell, ICFs combat what builder Bart Jones calls "monsters" in the housing industry: phantom problems and defects that threaten even the best builders. All but eliminating the possibility of mold growth and moisture damage, warped walls from green lumber drying in the desert heat, and other potential defects—while



building faster and delivering a more energy-efficient house—is well worth the 3 percent to 5 percent premium the Jones brothers pay to use ICFs. "By the time you frame, fur out, insulate, sheet, or shear a wood-framed wall, you've made that cost back," says Steven Jones. The ICF system was supplied by Arxx Building Products (Circle no. 996), with support from the Portland Cement Association (Circle no. 997).



NEW WAYS TO **SELL**

IF SOME BUILDERS AND SALES PROFESSIONALS view The New American Home 2004 as a tough sell to the mainstream, they're probably right. "This is a custom home, no doubt," says Borsanyi. "It's an edgy house. For production, you'd have to take off some of the edges."

But for a narrow niche of mature, affluent, and sophisticated couples in Las Vegas (or any major market), Borsanyi and the design/build team are convinced that demand exists for something a bit off-center. "We are unique," she says. "There's nothing else out there that is as handsomely done and as good a product in the custom market."

That distinction is what Borsanyi predicts will separate this house in a market with a two-year backlog of seven-figure-plus homes. "We had to be very specifically targeted to make buyers see the lifestyle differentiation," she says. "We

want them to say, 'This is my lifestyle,' when they see this home in relation to five other million-dollar homes that all look the same."

As for the mainstream appeal of the loft concept, Borsanyi and the design/build team believe it has legs as well. "The loft allows a more spacious house on smaller lots," says van Straten. "It enables buyers to get the 'big space' they want."

That said, all agree that a loft design requires an upscale context (ideally on a golf course or a waterfront lot for better resale value) supported by and accessible to mature infrastructure and services, among other site considerations. "It's a combination of forces that bear on the marketability of this house," says Borsanyi.

Meanwhile, the Jones brothers are seeing increasing interest in energy efficiency and usable, light-filled basement space among upper echelon buyers, albeit with a twist. "They may not care about saving \$100 a month on their energy bills, but they like the idea of being socially responsible when it comes to energy use and resource efficiency," says Steven Jones, thus

DRIVE-BY: The use of dual garage doors and translucent panels reduces the mass of the two-car garage on the elevation.

encouraging the design/build team to look for more opportunities to build with ICFs, SIPs, steel framing, mold-resistant drywall, and other products and systems that satisfy that desire. (see page 184)

Garage Specs

- A pair of garage doors (and automatic openers) from Overhead Door feature steel-framed, translucent panels that provide light into and out of the garage. Circle no. 998.
- A storage system from Gladiator offers efficient, secure, and durable storage for a variety of seasonal and outdoor gear, as well as tools. Circle no. 999.
- Square D provided the home's load center, with the main panel located in the garage. Circle no. 1000.
- Crews and subcontractors used a variety of power and pneumatic tools from Hilti (Circle no. 973).

PRODUCT SPECS



NEW WAYS TO COLLABORATE

IN ADDITION TO SHOWCASING NEW IDEAS in suburban single-family design and next-generation building systems and energy efficiency, The New American Home 2004 team exemplified uncommon collaboration from the start.

Before signing on for this project, the builder, the architectural consultant, and the interior merchandiser had already worked together to design, build, and market upscale single-family loft homes in Las Vegas—a cooperative effort that replaced the linear approach that is traditionally taken in residential development. “If you share knowledge and experiences from the start, that integration leads to a better product,” says architectural consultant Lex van Straten. “It seems like coordination happens too late on most projects.”

The builder agrees. “It was like magic watching this team work together,” says Steven Jones, extending credit to the trade partners and suppliers. “It’s amazing what you can get done with quality people.” (see page 186)

TEAM EFFORT: The New American Home 2004 design/build team: Standing (l-r): Dennis Moulton, executive vice president of corporate development and marketing, Jiun Ho Inc.; Greg Marshall, electronics design consultant, Creative Home Theatre; Dale Beck Jr., superintendent, Merlin Contracting & Developing; Matt Farmer, operations manager, Merlin Contracting & Developing; Tom Martojo, associate, Food for Buildings; Seated (l-r): Allisanne Frew, interior merchandiser, Source Française; Jiun Ho, interior merchandiser/furniture and lighting designer, Jiun Ho Inc.; Bart Jones, vice president, Merlin Contracting & Developing; Steven Jones, founder/owner, Merlin Contracting & Developing; W.A. “Lex” van Straten, architectural consultant, Food for Buildings. Not pictured: Willem Kymmell, architect of record, Willem Kymmell Architect.



NCHI LEADERSHIP: Tucker Bernard (left), senior director of the NAHB’s NCHI/Supplier 100, stands with TNAH ’04 task force chairman John Ted Mahoney III, president of Windjammer Construction Corp. in Bridgewater, Mass.

SPONSORS

- **SPONSOR:** National Council of the Housing Industry, the NAHB, Washington
- **BUILDER:** Merlin Contracting & Developing, Las Vegas
- **ARCHITECTURAL CONSULTANT:** Food for Buildings, Den Haag, Holland
- **ARCHITECT OF RECORD:** Willem Kymmell Architect, Oregon House, Calif.
- **INTERIOR MERCHANTISERS:** Source Française, Oregon House, and Jiun Ho Inc., San Francisco
- **MEDIA:** Hanley Wood, LLC (Builder magazine, Washington, and Home Planners, Tucson, Ariz.)

TO LEARN MORE ABOUT THE COMPANIES AND PRODUCTS MENTIONED IN THIS STORY, VISIT OUR WEB SITE AT WWW.BUILDERONLINE.COM. CLICK ON “THE MAGAZINES” TAB, AND THEN CLICK ON “BUILDER ARTICLE LINKS.”

PROJECT CONTRIBUTORS

The New American Home 2004 would not be possible without the generous support of the members of the National Council of the Housing Industry (NCHI)/Supplier 100 and other contributors, suppliers, trade partners, and consultants.

NCHI Member Contributors

- American Gas Association (consulting and technical services)
- Armstrong World Industries (wood flooring and cabinets)
- Black & Veatch (editorial support and tour coordination)
- Copper Development Association (roofing, fascias, venting, plumbing system, and railings/floors)
- Cutler-Hammer/Eaton Electrical (structured wiring system, protection panel, and electrical components)
- Daltile Corp. (ceramic tile)
- Davis Colors (concrete pigment)
- DuPont Co. (Zodiaq quartz surfaces)
- General Electric
- GE Consumer Products (lighting consulting and light bulbs)
- GE Modular Space (construction site trailer)
- Georgia-Pacific Corp./G-P Gypsum (DensArmor Plus wallboard and DensShield tile backer board)
- Health, Patis & Barbours Association (promoting services)
- HDTV Network (television coverage)
- Hilti (power tools and fasteners)
- Honeywell (climate controls, energy recovery ventilator, and HPA air filters)
- In-Sink-Erator Division/Emerson Electric Co. (food waste disposers and hot water dispensers)
- Johns Manville (formaldehyde-free insulation)
- Kohler Co. (plumbing fixtures and fittings, bath vanities and countertops)
- Kwikset Corp./Division of Black & Decker Co. (interior locks and hardware)
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- Lawren (interior doors and windows)
- Lutron Electronics (design services and lighting and home automation controls)
- Mazco Corp.
- Behr Process Corp. (paints and coatings)
- Brass Craft (plumbing connectors, valves, and shutoffs)
- Hot Spring (hot tub)
- Maxxite International Corp. (interior doors)
- National Renewable Energy Laboratory (energy codes program and consulting)
- Old Castle/MPG West (stairwork and handrails)
- Overhead Door Corp. (garage doors and openers)
- Portland Cement Association (consulting services and product coordination)
- Shaw Industries (area rugs, carpet, and underlayment)
- Simpson Strong-Tie Co. (framing connectors and fasteners)
- Square D Co. (load center)
- Steel Framing Alliance (consulting services and product coordination)
- 2-10 Home Buyer Warranty (home warranty products)
- Vent-Free Gas Products Alliance/GAMA
- A.O. Smith Water Products Co. (hot water heater)
- Dura International (patio heaters)
- Engle Curbert Systems (stainless steel outdoor grill)
- Whirlpool Corp.
- Gladstone (garage storage system)
- KitchenAid (major and small appliances)
- Whirlpool (laundry equipment and Personal Vault)

Other Contributors, Suppliers, Trade Partners, and Consultants

- Albion Plumbing (plumbing installation)
- Accent Awning (exterior shading system design and installation)
- AFM/Associated Foam Manufacturing (DIPs panels)
- Alpha-Vison (computer-generated renderings and marketing consulting)
- American Access Systems/Lahr (elevator and installation)
- Apex Sausage & Wine Cellars (wine cellar and racking)
- Applian Way Sales (courtyard pedestal system)
- Archie Held Studios (fountain sculptures and accessories)
- Arxx Building Products (insulated concrete forms)
- Beadon Shuco (shuco installation)
- Bernardaud (china and linens)
- Big Pappas (furnishings and accessories)
- Bonawit Corp. (concrete wash materials)
- Boyd Lighting (light fixtures)
- Boys Hope Girls Hope (charitable beneficiary of local tours)
- Brecoaire (self-contained wine cellar refrigerator)
- Brian's Masterpiece (wood flooring installation)
- CA Cement Protection Council (concrete supply/installation coordination and consulting)
- California Closet Co. (closet storage systems)
- Calply (steel framing)
- Carrel Fabrics (fabrics)
- CAT MIX (home theater design and installation, including: ADA Audio Design Technologies (home theater design); California Audio Technologies (audio system supplier and installer); Creative Home Theatre (low-voltage wiring and home theater systems); Monitor Cable (low-voltage and other cable); Ruxco (projector supplier); Stewart (film screen); Xplore Solutions (Internet consultant))
- Cemex (steel wall framing)
- Cemex (stucco cement)
- Cheyenne Steel (structural steel supply and installation)
- Chromalloy Silver (silver, crystal, and table linens)
- Christopher Hyland Inc. (fabrics)
- The Concord Group (marketing consulting and analysis)
- CVC-Coating (protective film for exposed glass during construction)
- Decorative Arts Center (fabrics)
- Design Concrete (structural and decorative flatwork installation)
- Design Within Reach (exterior and interior furnishings)
- Dietrich Industries (steel floor framing system)
- Doughla (furnishings, lamps, and accessories)
- Eagle Precast (precast-concrete deck)
- Econ Appliances (kitchen range hood installation)
- Energy Inspectors (HVAC system testing and energy audit)
- Excel Glass (exterior glass panels)
- Fanner Brothers Development (lifting equipment)
- GenTek (construction/engineering consulting)
- Glassic Art (custom glass artwork)
- Great Western Survey (surveying services)
- GT Stoneworks (wall and floor tile installation)
- The Hammock Source (outdoor furniture)
- Harbour Excavation (excavating services)
- Harmer and Co. (drapery fabrication)
- IBACOS Consortium (energy consulting, monitoring, and analysis)
- Icon Health & Fitness (fitness equipment)
- Indus Valley Arts (Buddha and Asian reproduction statuary)

- Interroll/Strubbe & Ramm (curtain hardware)
- Interwest-Tempco Arizona (kitchen-range hood)
- Juan He Inc. (interior merchandising, furnishings, and rug)
- Kelly's Pipe and Supply (rough plumbing supply)
- Lakes at West Sahara Association (consulting/support)
- Landscape (hardscape microtopping, staining, and exposed aggregate installation)
- Las Vegas Wrought Iron (fences and gate)
- Lyra Grills (outdoor grill)
- Marble Granite & Tile (stone veneer specialty cuts and post-coping installation)
- Maya Romanoff Corp. (wallpaper)
- MortMaster (evaporative cooling system installation)
- Mobing Fireplaces (consulting/design and master suite fireplace)
- Muse Group (bed linens, towels, and drapery fabric)
- Nevada Sources/Jay Pluggenkukle (landscape design and installation)
- Nevamar Decorative Surfaces (elevator cab finishes)
- New Creation Masonry (stone veneer and block installation)
- Alern Rental (equipment)
- Construction Sealants & Supply (sealants)
- Tri Delta (masonry supply)
- Night Shift (interior wall surface finishes)
- Norads Sheet Metal (copper louvers design, fabrication, and installation)
- Nora Lighting (light fixtures)
- Phonasonic (home theater film screen)
- Pioneer Electronics (high-definition TV)
- Planworks (interior plants)
- Phyon Van Lines (shipping)
- Precast/Prestressed Concrete Institute (precast-concrete deck)
- Prestige Pools (pools)
- Prestige Roofing (copper roof and fascia installation)
- Rad Rock Insulation (insulation supply and installation)
- Renaissance Vineyard and Winery (wine cellar supplies)
- Seabuck (moldings and door jambs)
- Seating Innovations (interior suspended seating)
- Seely Systems (motors and controls for exterior awnings)
- Sonance (home theater speakers)
- Source Françoise (interior merchandising)
- Southern Nevada Concrete and Aggregate Association (concrete supply/installation coordination and consulting)
- Southern Nevada Ready Mix (concrete supply)
- Southwest Gas (consulting and technical services)
- Spa by Rome (spa supply)
- Star Nursery (landscape plants and trees)
- Stapstone (courtyard pavers)
- Stratton Electric (electrical system services and installation)
- The Structural Insulated Panel Association (SIPs consulting and information)
- Sunrise Mechanical (mechanical systems installation)
- Tarus Design (antique accessories and furniture)
- 3G Marmer Corp. (exterior shading fabric)
- Tubekian Carpers (area rugs)
- TX Riverside (white pool plaster cement)
- United Green Mark (irrigation system and lighting)
- Universal Brass (chair railing installation)
- Valli & Valli (cabinet hardware and entry-door lockset)
- Valcraft (suspended ceiling system)
- The Wicker Works (furniture)
- Windstone (bed and window drapery and treatments)
- Wright Engineering (engineering consulting)

TOUR INFORMATION

The New American Home 2004 is open for free guided tours during the International Builders' Show (IBS), January 19-22. Free shuttle service is provided from the Las Vegas Convention Center (LVCC). The home is approximately 15 minutes' drive from the LVCC, in the Beach View Estates section of the Lakes at West Sahara. IBS attendees can get more information at the show, or online at www.buildersshow.com/NCHI or www.builderonline.com. See the map below for driving directions.



DIRECTIONS (FROM THE LAS VEGAS CONVENTION CENTER): Take Desert Inn Road west; turn right onto Crystal Water Way; turn right onto Beach View Court; turn right onto Island View Court. The New American Home 2004 is the first house on the right.