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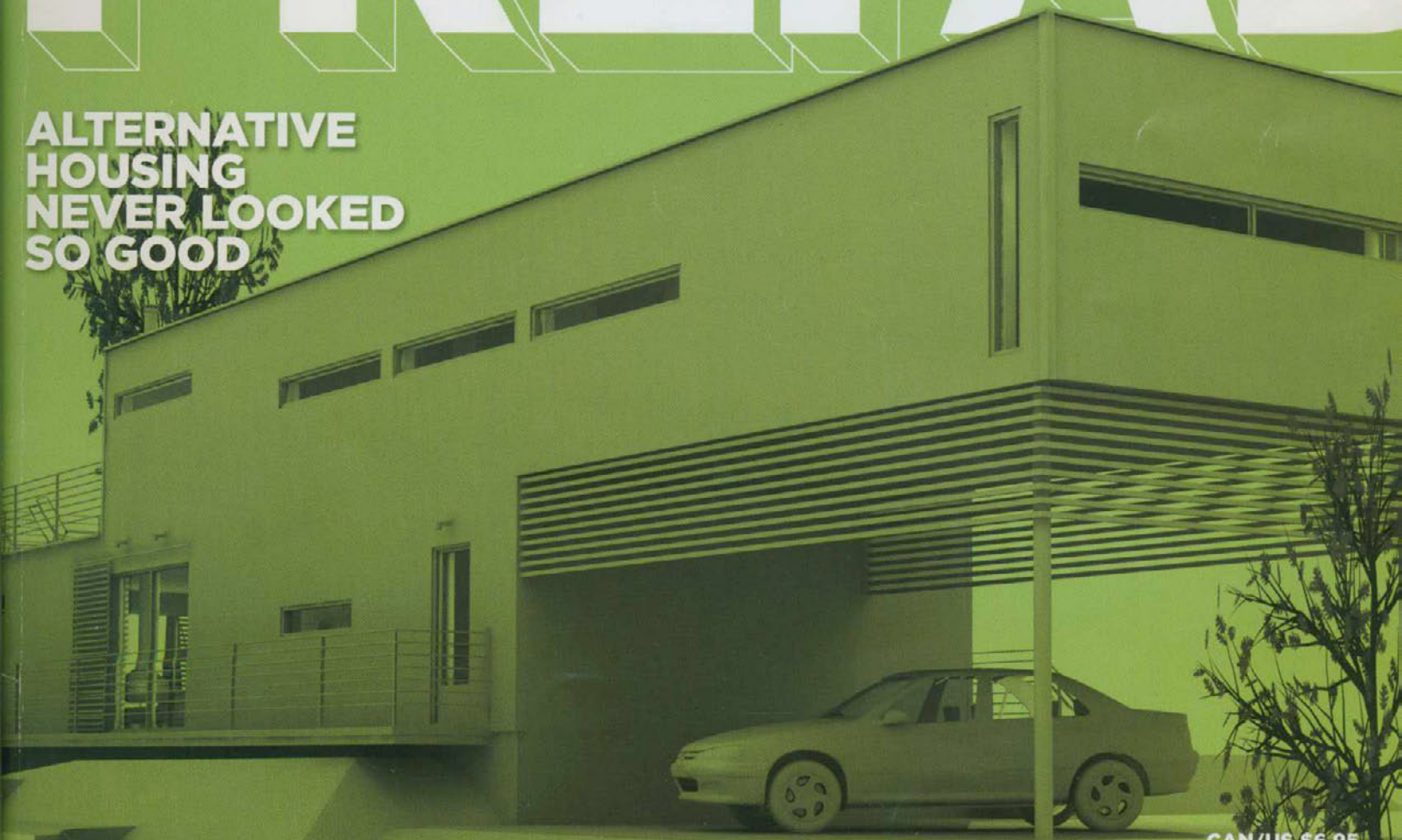
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# THE NEW PRE- FAB

BY  
JOHN  
BENTLEY  
MAYS

MODERNIST-STYLE PRE-FABRICATED HOUSING IS BACK AND BETTER THAN EVER. BUT MANY A BOOM IN PREFAB HAS GONE BUST. WILL THE MASSES GO FOR THIS NEW MODERN?



THE M-HOUSE (PRONOUNCED "MOUSE"), DESIGNED BY U.K. ARCHITECT TIM PYNE, ARRIVES IN TWO PIECES, EACH THREE METRES WIDE. IT TAKES A DAY TO JOIN THEM TOGETHER ON-SITE.





right now than prefab. It's all over this week's newspapers and this month's magazines, in your face, on the Web, on the news. Avant-garde architects and designers, who have been having an on-again, off-again romance with factory-built housing for nearly 100 years, have fallen madly in love all over again. Even North America's general public, which has been indifferent to architecturally inspired prefab at the best of times, seems vulnerable to the fever. The day a prefab house designed by the New York firm Resolution: 4 Architecture won an international design competition, for example, the company's Web site took 330,000 hits before crashing.

So whence the turnaround? One notable event was the 2002 publication of *Prefab*, by Allison Arieff, editor of San Francisco-based *Dwell* magazine, and designer and editor Bryan Burkhart. This handsomely designed, frankly polemical book spelled out the modern history of prefabricated housing – largely a chronicle of imaginative, idealistic architects and designers bashing their heads against the brick wall of economic facts and *retardataire* public taste – and scrapbooked 25 contemporary projects by some of the most adventurous prefab designers at work anywhere.

The other event, also in 2002, seems momentous only in retrospect. It happened the day Nathan Wieler and his wife-to-be, Ingrid Tung, went looking for a modern, affordable house in the neighbourhood of Chapel Hill, North Carolina, and didn't find anything they wanted. A native of St. Catharines, Ontario, Wieler was 29 at the time, and running his own digital media company, called Zoom Culture. He was the kind of guy you'd expect to find in Chapel Hill, then and now a centre of high-tech research and development: a young, ambitious entrepreneur with Internet-age sensibility and an eye for flair in architecture and design. "We were pretty quickly turned off the designs that were out there," he recalls. "Everyone was striving to do cookie-cutter designs. I was thinking about doing something unique. That's when we stumbled upon *Prefab*."

About the time Wieler and Tung were discovering the visions catalogued in the book, co-author Arieff and her staff at *Dwell* were thinking



**ROYAL HOMES, A CANADIAN MODULAR HOME COMPANY, OFFERS THE FULLY EQUIPPED THREE-BEDROOM GLIDEHOUSE BY SAN FRANCISCO-BASED DESIGNER MICHELLE KAUFMA**

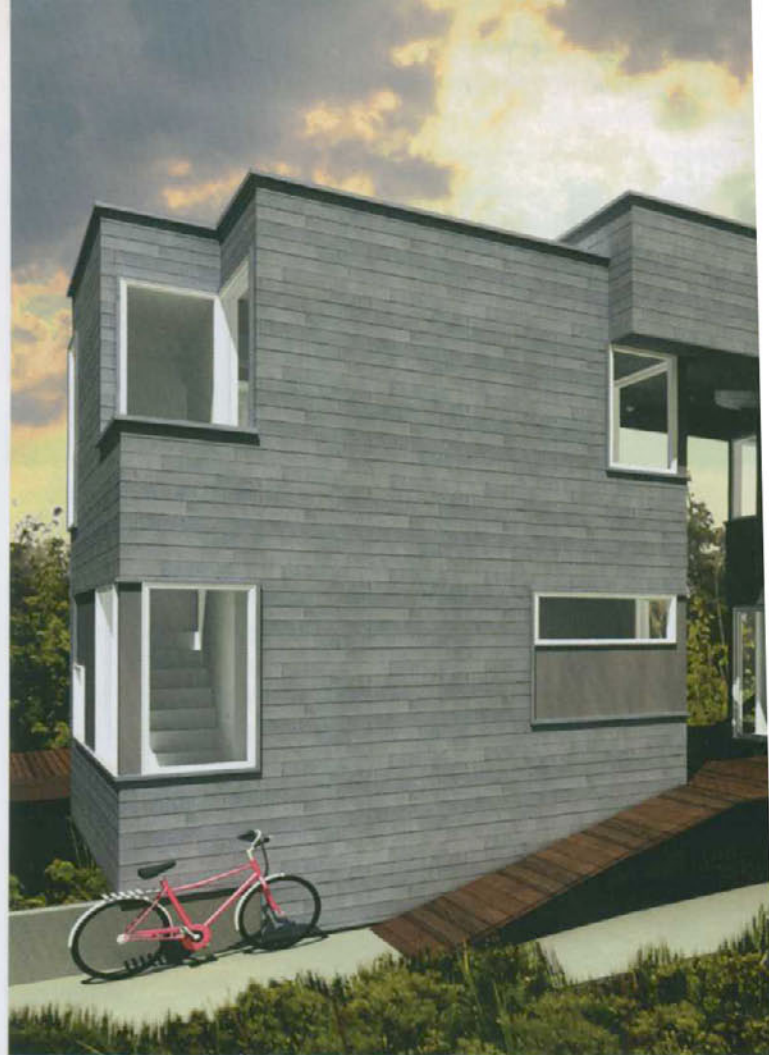


**THE SIGNATURE FEATURE OF THE BREEZHOUSE – THE SUCCESSOR TO KAUFMANN'S GLIDEHOUSE – IS THE CENTRAL BREEZEROM WITH TWO OPPOSING WALLS OF GLASS THAT FOLD TO ONE SIDE**



**THIS HOUSE BY RESOLUTION: 4 ARCHITECTURE, SHOWN IN RENDERING, WILL BE DELIVERED BY BARGE TO A BEACHFRONT PROPERTY ON FIRE ISLAND AND CRANED INTO PLACE.**

**SIXTY YEARS AGO, MINNEAPOLIS DESIGNER RALPH RAPSON PUBLISHED A DESIGN FOR THE DARING, MODULAR GREENBELT HOUSE – WHICH, TO HIS DELIGHT, IS FINALLY BEING BUILT.**



**THE OWNERS OF AN IT HOUSE, BY TAALMAN KOCH ARCHITECTURE, CHOOSE THE 3M GRAPHIC VINYL THAT ADHERES TO THE INSIDE SURFACE OF THE GLASS WALLS, PROVIDING SHADE AND PRIVACY.**

**PROGRESSIVE FIRM LOT-EK PLANS TO DEBUT ITS CHK LOFT CONTAINER HOME KIT – WHICH MAKES USE OF STANDARD DRY-FREIGHT HIGH-CUBE ISO CARGO CONTAINERS – LATER THIS YEAR.**



about mounting a design competition to celebrate and promote prefab housing. But it was an enthusiastic phone call to the magazine from Wieler, and his willingness to pay for building the best project – “It was a way to get a cool modern house,” he tells me – that prompted the editors to launch the Dwell Home Design Invitational, with Wieler as a judge and the ultimate client. The result was a provocative competition featuring 16 American, European and Australian designers of prefab housing. The winner was Resolution: 4 Architecture of New York – the company whose Web site went down in flames on that day in 2003 when its win in the Dwell Invitational hit the newspapers.

It took more, however, than a San Francisco magazine, a coffee-table book, a transplanted Canadian businessman and a sharp, modern design by a New York firm to boost prefab from relative obscurity back to popularity with both artists and a design-savvy public. “I started delving into the reasons about three years ago, and decided one of them was 9/11,” says Joseph Tanney, partner in Resolution: 4 and co-creator (with Robert Luntz) of the winning Dwell Home. “A number of clients wanted to move out of the city, or have a second home out there. They wanted something you could ship out to Jersey.

“At the same time,” he continues, “we saw the rise of design consciousness in middle America. You could buy a toothbrush designed by Philippe Starck at Target. It’s what was happening – design coming into the home – but nobody was addressing the mass-produced home itself.” Resolution: 4 has since developed and designed a “modern modular” home available in 32 different geometric configurations.

Another challenge has been to identify and reach the kind of people who buy Philippe Starck toothbrushes, who like to spend weekends outside the big city, and who might like high-design assembly line housing just for the chic of it. “There is a strong core group that will make prefab popular,” says Giuseppe Lignano, principal in the New York firm LOT-EK, which plans to debut its CHK Container Home Kit later this year. “They are young, professional, urban, very much connected to the





thetic ideas, and interested in making their home a design lifestyle statement. They are searching for a prefab product that is not a plastic Victorian, fake log cabin, but is connected with our way of life.”

The contemporary prefab aesthetic, judging from LOTUS, what most other designers of modular are now doing, is a clean, open-plan interior enclosed, in almost all cases, by a simple, flat-sided box formed by some combination of metal, glass and wood. The client for a modern prefab seems pitched is mobile, practical and minimal, easy to assemble and disassemble, and connected with the products and processes of mass production, comfortable in the flow of information, capital and images.

But if there is a sense of pessimism within the otherwise optimistic temporary culture of prefab, an enduring hindrance to advanced kit housing in North America, it is consumers' reluctance to embrace the prefab dream. So far, enlarged public curiosity has not translated into sufficient consumer demand to bring the retail price much below that of ordinary construction. Royce, a Canadian modular home company based in Wingham, Ontario, offers the fully equipped three-bedroom Glidehouse, by celebrated interior designer Michelle Kaufmann, for C\$325,000. The 214-sq-ft Dwell Invitational winner ultimately cost Nathan Wieler over \$300,000, plus the price of land and site preparation. Minneapolis developer Lazor's cheapest FlatPak house – a kit that unfolds into a modern elegant house with appliances, lighting, bathroom fixtures and more – also comes in at about US\$350,000 for 185 square metres.

Add the deep-rooted North American prejudice against prefabrication to the high price of the well-designed stuff, and it's hardly surprising that trucks laden with clever modular homes aren't clogging the roads. Resolution: 4 Architecture's Web site is getting some 20,000 hits a month, says Tanney, but the firm has garnered only about a dozen commissions. The FlatPak house has found six takers since its





er, Koyal's Glidehouse has sold two units in Ontario, bringing the North American total for this sleek design to about 30.

But not to worry, says Fred Hallahan, a Baltimore-based consultant to the U.S. manufactured and modular housing industry. ("Manufactured housing," by the way, is the U.S. government's official term for mobile homes.) "There is clearly an interest in the marketplace for improved design," Hallahan says. And advances in computer-assisted design and automation have meant that "as the modular housing market has grown, design limitations have been removed. With improved CAD systems, manufacturers can make changes and control their production processes to make more flexible designs."

In the tiny Canadian market for manufactured housing, where sales of factory-built houses have gone up 65 per cent in the past five years, there seems to be little pressure on the modular industry to embrace architecturally daring designs. In the States, it's a different story. With mobile home sales down 62 per cent since 1999, U.S. manufacturers are looking for new ideas and new applications for their tried-and-true production facilities. In North Carolina, for example, "a red-hot housing state, with an enormous presence of dealers for manufactured housing, many producers have converted to modular housing," says Hallahan. But it may take a while before the design of that mass-produced housing is firmly in the hands of advanced architects. "There is a bridge that has to be built between the manufacturers and architects. The architects often go too far too fast, bringing in esoteric designs, and the manufacturers tend to look at architects as not fully cognizant of what is involved on the construction side."

Speaking of North Carolina, one prefab enthusiast who's decided to seek his fortune in the state's burgeoning real estate market is Nathan Wieler, now 32. The owner of the winning Dwell Invitational house has left Zoom Culture behind, and is now making ready to develop 60 hec-



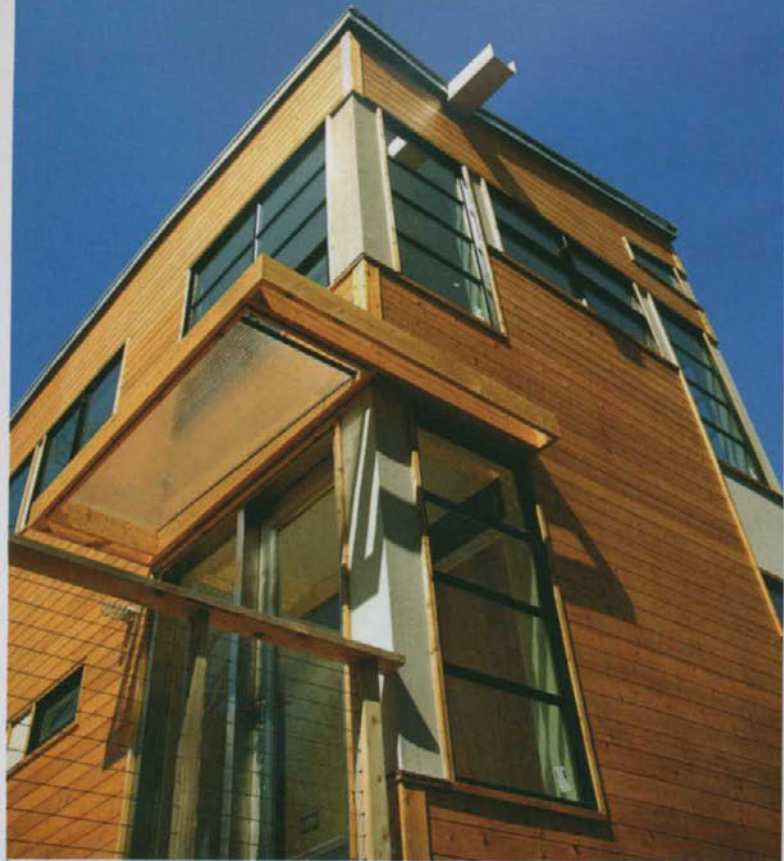
**MISSOURI-BASED ARCHITECT ROCIO ROMERO DESIGNS AND BUILDS ALL HER PREFAB PROTOTYPES. HER ULTRAMODERN LV SERIES OF HOMES FEATURES GALVALUME EXTERIOR SIDING.**



**SWEDISH DESIGN FIRM PINC RECENTLY WON A RED DOT DESIGN AWARD FOR ITS THREE LINES OF HIGH-QUALITY PREFAB HOUSES: BLACK BARN, PACIFIC AND (SHOWN HERE) SPORT.**







RESOLUTION: 4 ARCHITECT  
 AWARD-WINNING DWELL H  
 STARTED A TREND. THE FI  
 SINCE DESIGNED A "MOD  
 MODULAR" HOUSE AVAIL  
 32 GEOMETRIC CONFIGUR

tares of rolling countryside near Chapel Hill into a community of modern modular homes – in other words, places of the kind that he couldn't find back in 2002 when he was looking for something to buy.

Interestingly, his first designer on the project is not Resolution: 4 or LOT-EK, or anyone else from the newest crop of evangelists for the prefab gospel. Minneapolis designer Ralph Rapson was designing prefab a few years before the current explosion of popular interest in the topic – some 60 years before, in fact. It was in 1945 that he published a design (never built) for the daring, modular Greenbelt House in the famous Case Study series of industrialized housing proposals. Wieler is now building the first (somewhat modified) Rapson Greenbelt, next door to his Dwell Home. "It's a great design," he says, "a great, simple modern design with a central atrium, and open to different manipulations. It will cater to the new market for prefabricated and modular homes, which is looking for the long-term value that comes with owning a Rapson Greenbelt."

An acquaintance of Le Corbusier in Paris, a contemporary of Ludwig Mies van der Rohe, Frank Lloyd Wright and Charles and Ray Eames in the United States, Rapson, now 90, is glad to be designing prefab again. And he is delighted by the revived interest in the historical modern ideals of clean form, clear spatial flow, and a firm partnership between the mechanisms of mass production and the building arts.

"It is very difficult to do a prefab house," Rapson says. "But doing a small, economical modular home solves a general need, and for that reason is far more interesting than a large mansion. It takes honest analysis, careful and complete. It's a long journey, involving integrity of process, addressing ecological questions, recognizing the totality of things. It's also a recognition of the potential of our times." ▲

LEFT: BY WES MILHOLLEN  
 PHOTO: TOP



NEW JERSEY DESIGNER GR  
 LA VARDERA HAS BEEN W  
 WITH A LOCAL STEEL COM  
 ON THE PRODUCTION OF HIS  
 FRAME 6030 HOUSE (AND  
 6040 HOUSE).