

亚利桑那的爵士 Arizona Jazz

Text、Photography/ 撰文、摄影: Bradley Wheeler/ 布雷德利·惠勒

Design/ 设计师: Rob Paulus Architect / 诺伯·鲍罗斯

name of projects/ 项目名称: Barrio Metalico, Ice House Lofts, indigoMODERN

location/ 位置: Tucson, Arizona/ 亚利桑那州, 图桑市

The complexion and complexity of Tucson, Arizona's urban core is experiencing dynamic improvement at the hands of a socially minded architect who is also the developer. This southern Arizona community, (city population 518,956 / metropolitan area population 946,362) located 96 kilometers (60 miles) north of the Mexican border, is an island of civilization amid the "magnificent desolation" of the Desert Southwest.

The architect to the rescue is Tucson native, University of Arizona Architecture graduate, and accomplished jazz musician Rob Paulus, A.I.A. (American Institute of Architects). His work is modern yet unpretentious, all the while completing the greater good of reinforcing existing and forlorn neighborhoods by infusing them with residents attracted to improving the area and living ecologically in the older center of town.

Rob Paulus Architect is a multifaceted firm working on a variety of project genres. The ones attracting all the international attention thus far are their multi-family housing units. In fact, over the past few years, the Tucson-based studio has produced three such award winners. Each project is green and sustainable, and caters to the target demographic, a market consisting of people who refuse to live in the faux-Mediterranean villas or plaster English cottages that have plagued the post World War II American housing-scape like a locust pestilence of bad architecture.

Bradley Wheeler/ 布雷德利·惠勒: 本刊海外特约编辑, 美国、意大利等国建筑杂志专业编辑, 建筑师, 摄影师。



All three of the Paulus projects are interconnected by the common theme of community building in "lost neighborhoods" – an endeavor that previous developers have economically feared to attempt. Now, due to the success of Paulus' projects, the architect is being complimented by imitation – other entrepreneurs are following the "pioneer's" lead by acquiring property and building downtown. The city building department has even altered its zoning restrictions, thanks to Paulus' architectural successes and tireless championing of the

belief that urban dwellers could and would live in a light-industrial zone. It is estimated that 1000 new residential units have been built in and around the downtown area since Paulus' first foray in the area.

To better appreciate these three ground-breaking projects, it is important to know their timeline. In the spring of 2002, the architect along with his developer partners (his wife Randi Dorman, Phil Lipman, and Warren Michaels) decided to take on the herculean task of converting a 126 m. (413') long, 1923 ice-making factory into

51 condominium units (the Ice House Lofts) in a somewhat dilapidated district of the city. Since the equipe' estimated the project would take three years, they decided to simultaneously acquire nearby property and create a small modern community (Barrio Metalico) in less time. This quicker, smaller-scoped project would help boost the micro economy by injecting life into the Millville neighborhood and thus pave the way for the Ice House Lofts.



"Barrio Metalico"

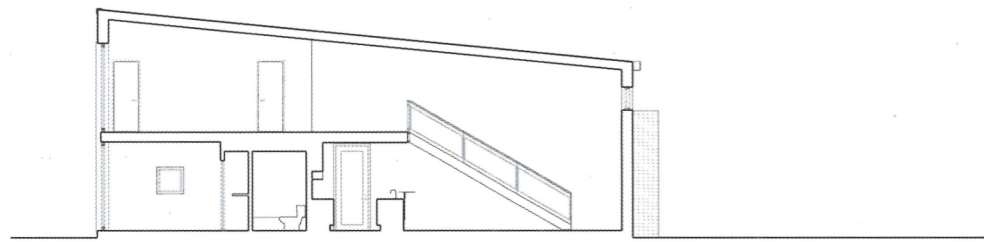
Barrio Metalico consists of nine 139 sq. m. (1,500 sf) galvalume-sided live/work spaces. Since this project was faster to "go up," it was on the receiving end of the recyclable Ice House material. As a result, all of the Metalico's exterior and interior fencing comes from the larger project. Wooden siding, creosote flooring, and corrugated metal are prevalent and 100% recycled. Adobe walls from the previous turn-of-the-century worker housing are

left standing and are used as perimeter barrier to serve as a memory of its past life.

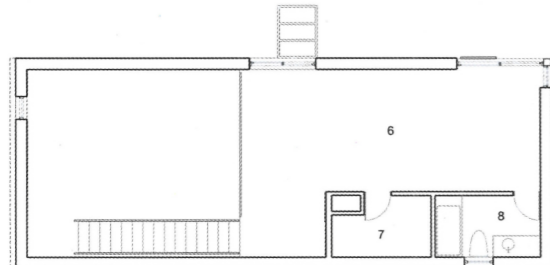
The units themselves are lightweight shells made of 30.5 cm. (12") walls with R-47 blown-in fiberglass insulation. The thick walls with high insulation values save energy and allow heating and air conditioning to be used sparingly (summer temperatures can exceed 44.5 °C / 112 °F while winter lows can go below -6°C / 21 °F.)

Piante e sezione (nella pagina seguente) evidenziano il layout semplice e lineare delle unit à, che si estendono su una superficie di 139 metri quadrati. Esternamente, il Galvalume(R) riveste le pareti da 30,5 cm con materiale isolante iniettato in fibra di vetro R-47, contribuendo a mantenere gli spazi caldi in inverno e freschi in estate. Floor plans and section (following page) illustrate the straightforward and uncomplicated layout of the 139 sq. m. (1,500 sf) units. Exterior Galvalume(R) clad 30.5 cm. (12") walls with R-47 blown-in fiberglass insulation help keep the spaces warm in winter and cool in summer.

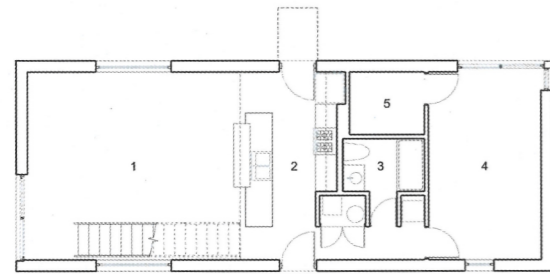




SECTION



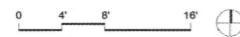
UPPER FLOOR PLAN



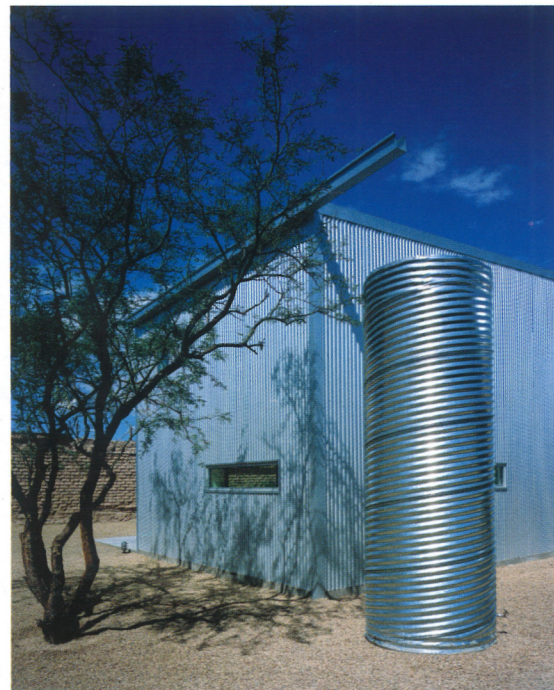
GROUND FLOOR PLAN

- 1 LIVING
- 2 KITCHEN
- 3 BATH
- 4 BEDROOM
- 5 CLOSET
- 6 LOFT
- 7 CLOSET
- 8 BATH

BARRIO METALICO
Tucson AZ



Rob Paulus Architect Ltd.
www.robpaulus.com



Rain water is harvested off the roofs by draining the gutters into 1.22 m (4') diameter metal culverts that stand 3.65 m. (12') vertically. A foam pad keeps mosquitoes from breeding and water from evaporating. The water is used to irrigate exterior sustainable gardens kept by many of the residents. During an autumn monsoon, the over 4400 liter (1000 gallon) cistern can nearly be breached during the course of a downpour.

Barrio Metalico's open floor plan, sustainable lifestyle and gritty urban feel offered cosmopolitan buyers a modern alternative to the standard housing fare found in much of the city. The New York Times reported that the first units sold for a pre-construction price of \$185,000 and after only a few months, appreciated to \$299,000 (and beyond). This proved Paulus' theory that there was a definite market in "The Old Pueblo" for green and modern living accommodations that did not have faux-timber cottage eaves or red-tile Spanish hacienda roofs.



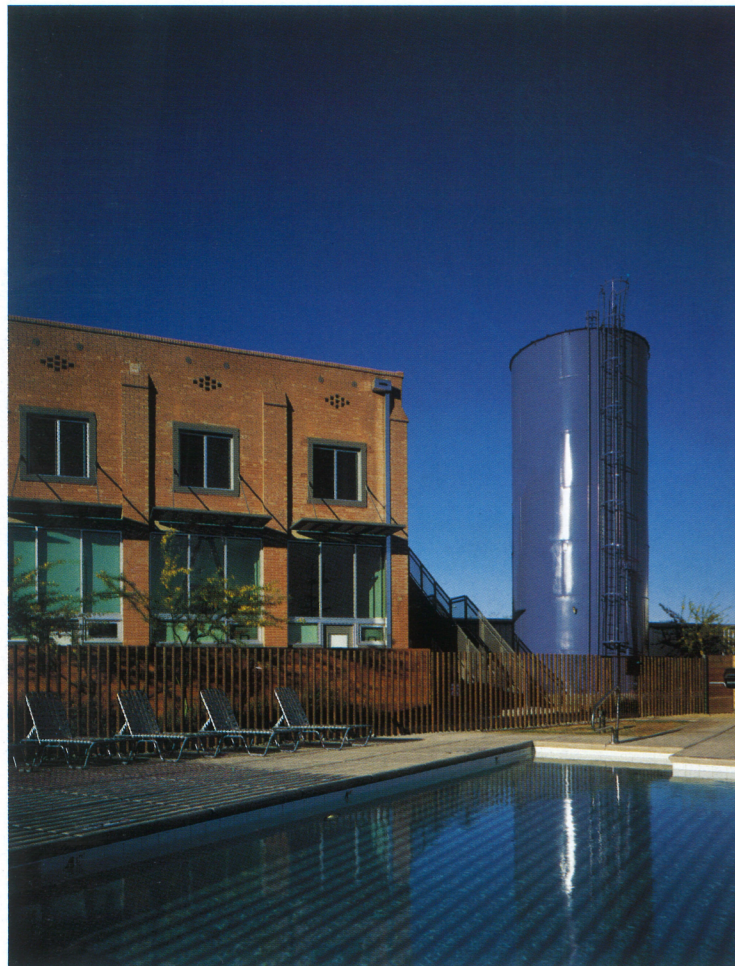
All ' i n t e r n o , s c a l e e c o r r i m a n o i n m e t a l l o i n t e g r a n o i l r i v e s t i m e n t o e s t e r n o . L a c i s t e r n a f a p a r t e d e l s i s t e m a d i r a c c o l t a d e l l ' a c q u a p i o v a n a . I l c o n t a i n e r h a u n a c a p a c i t à d i o l t r e 4 4 0 0 l i t r i , c h e p u ò e s s e r e q u a s i s u p e r a t a n e l c o r s o d i u n o d e i m i t i c i t e m p o r a l i d i f i n e e s t a t e . M e t a l s t a i r s a n d h a n d r a i l s o n t h e i n t e r i o r c o m p l e m e n t t h e e x t e r i o r s k i n . A b o v e : T h e c i s t e r n i s p a r t o f t h e r a i n w a t e r h a r v e s t i n g s y s t e m . T h e c o n t a i n e r h o l d s o v e r 4 4 0 0 l i t e r s (1 0 0 0 g a l l o n s) a n d c a n n e a r l y b e t o p p e d d u r i n g o n e o f t h e m y t h i c a l l a t e s u m m e r e l e c t r i c s t o r m s .

“Ice House Lofts”

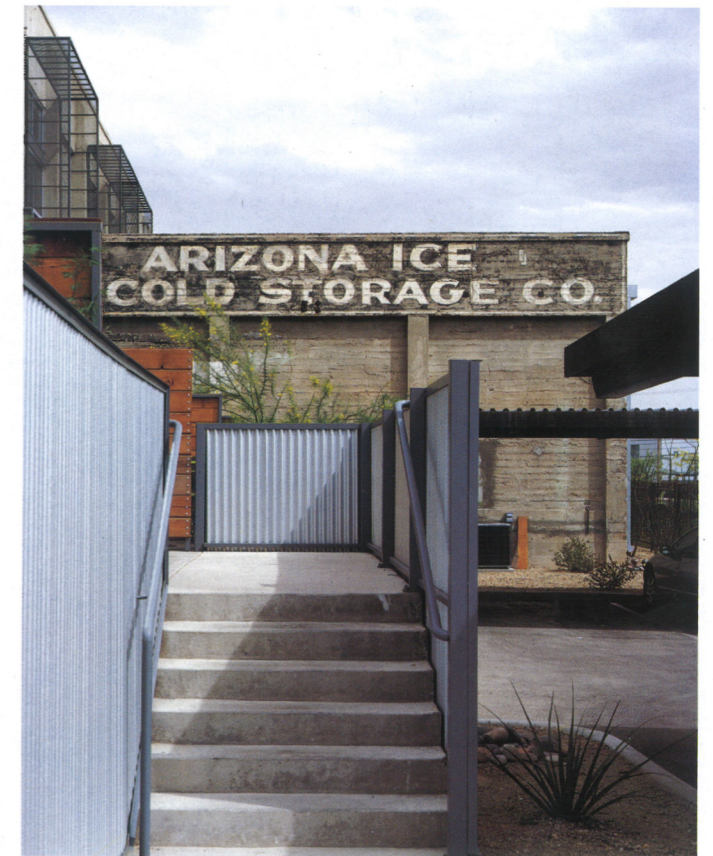
A year after the first Barrio Metalico units were put on the market, the Ice House Lofts were completed directly north, across 17th Street. Due to the success of the first project, there is already an interest in this second Paulus endeavor.

The enclave of nine Metalico units plus 51 Ice House Lofts favorably impacts the micro economic climate of the neighborhood. Pre-construction prices for the Ice House start at \$1819 per sq. m. (\$169 per sq. ft.) and quickly rise to \$2422 per sq. m. (\$225 per sq. ft.) by construction completion for both the smaller 58 sq. m. (621 sf) units and larger 218 sq. m. (2344 sf) models. Post construction prices have been as high as \$2906 per sq. m. (\$270 per sq. ft.) for some of the units.

The Ice House also taps into a demographic hungry for modern and sustainable high density urban living. Buyers are attracted by “being able to live in a part of Tucson’s history and keep it out of a landfill as well,” says Billy Maas, one of the first residents to purchase her double unit before it was completed. “A special kind of person was drawn to the Ice House,” she continues, “not based strictly on price or square footage, but on helping to save this magnificent structure.” To her point, by not knocking the building down and starting over, 1240 tons of concrete and 777 tons of brick (not to mention endless amounts of trusses, beams, columns, etc.) were left in place – material that otherwise would have been carted off to a distant landfill.



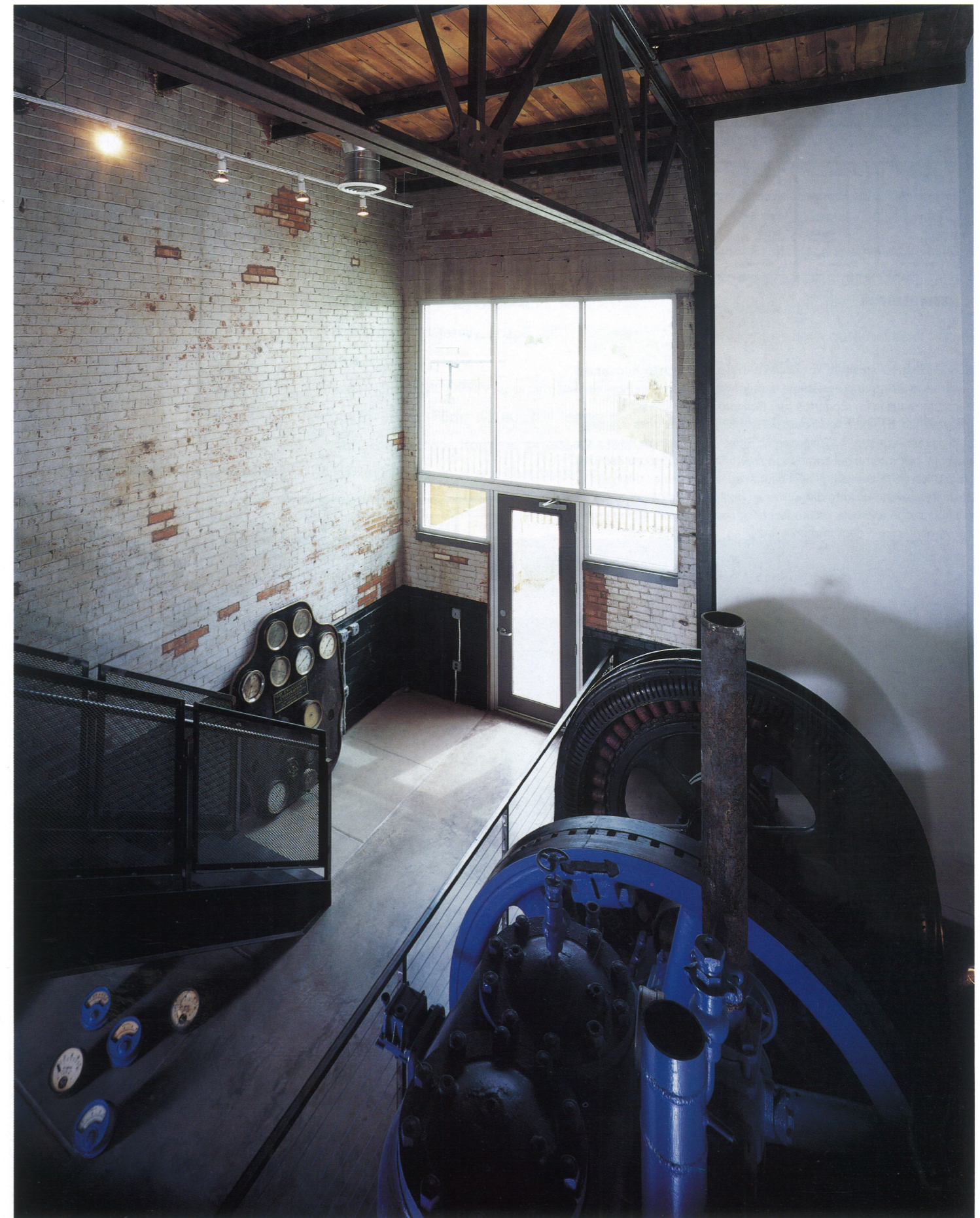
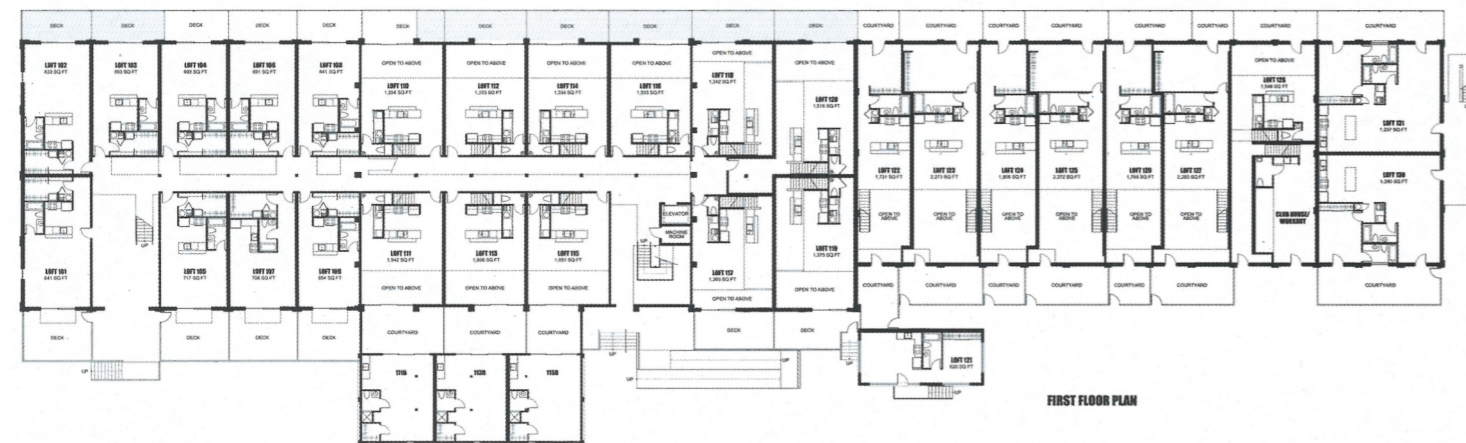
Da una fabbrica di produzione del ghiaccio del 1923, lunga 126 metri, sono state ricavate 51 unità condominiali. I residenti sono stati contenti di vivere in un edificio storico e che il loro contributo (o v v e ro la loro proprietà) abbia evitato di demolire la struttura. La torre di magazzino dell’acqua, alta 11 metri, si erge ora a simbolo dell’Ice House. Il segno dell’azienda originale del 1923 contribuisce a sottolineare l’importanza storica della struttura e l’immediata vicinanza della ferrovia ha aumentato l’attrattiva del progetto. 51 condominium units were created from a 126 m. (413’) long 1923 ice-making factory. The residents enjoy living in a historic building and are proud that their contribution (ownership) helped prevent the structure from being demolished and filling-up a landfill. The factory’s 11 m (36’) tall water storage tower is now a symbol for the Ice House. The original 1923 company sign helps signify the historic importance of the structure. Immediate proximity to the railroad tracks made the project all the more attractive to many buyers.





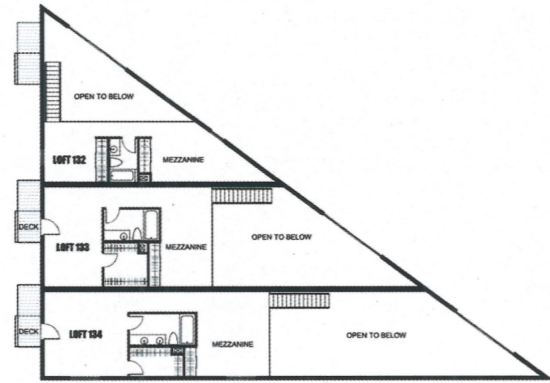
La scala centrale crea possibilità di aggregazione per i residenti del secondo piano. I dettagli in acciaio sono indicativi dell'elevato standard progettuale dell'intero progetto. Tubature di refrigerazione lunghe 1,1 chilometri, con un diametro di 5 centimetri, sono state recuperate e utilizzate a scopo di recinzione. Un compressore frigorifero della fabbrica degli anni Venti è stato preservato come monumento in ricordo del passato della struttura. Altre attrezzature per la produzione del ghiaccio sono sparse in tutto il complesso. Qui sotto, vedute in pianta delle unità, di varie dimensioni, ricavate nell'edificio originale in mattoni e cemento. Nella pagina accanto, la zona giorno dell'unità dell'architetto. L'ampia pianta aperta consente notevole flessibilità nella disposizione degli arredi.

A centralized staircase creates an additional moment of community for second floor residents. The steel details are indicative of the entire project's high level of design. 1.1 linear kilometers (3600') of 5 centimeter (2") diameter refrigerant piping was salvaged and repurposed for fencing a round the pool and bike racks. A refrigeration compressor from the 1920s factory remains as a monument to the structure's past. Similar ice making equipment is found throughout the complex. Bottom, plan views showing the various sized units created within the original brick and concrete edifice. Opposite page, living room space of the architect's own unit. The large open plan allows for flexible furniture placement.



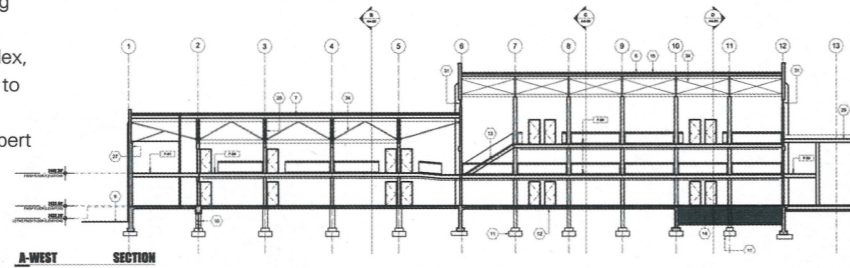


FOURTH FLOOR PLAN



TRIANGLE BUILDING - SECOND FLOOR PLAN

Sopra: il team di architetti è riuscito aAbove: The architecture equipe decifrare la struttura preesistente in modowas able to decipher the exist da trasformarla in un progetto truc ture into a workable sche realizzabile di 51 unit à individuali in unof 51 individual units in a sing solo giorno. A destra: Il "Triang leday. Right: The "Triangle Build Building," all'interno del complesso Icewithin the Ice House complex, House, ospita nuove unit à destinate ahouses new units designed to sfruttare appieno un lotto dallautilize an oddly shaped parcel configurazione anomala, creato facendoc reated by converging propt convergerele linee degli immobili. lines.



Nella pagina accanto, di nuovo Ice House Loft. Gli alti soffitti rivelano le capriate in acciaio originali chiodate a caldo. L'altezza verticale di 6,5 metri fa sembrare lo spazio più ampio di quanto sia in realtà. Le alte finestre frontali consentono alla luce naturale di penetrare in profondità nell'unità abitativa. Qui sotto, Indigo MODERN al tramonto. Lo speciale layout crea una sorta di schiera di unità abitative separate, unifamiliari, le cui pareti torreggianti offrono ombra e privacy ai vicini. Opposite, again Ice House Loft. Tall front windows allow natural light to penetrate deep into the 20 m (65') long unit. High ceilings reveal the original hot-riveted steel trusses. The 6.5 m. (21') vertical height makes the space seem even larger than it is. This page, IndigoMODERN at sunset. The unique layout creates a type of row-housing of separate, detached units whose towering walls provide shade and privacy to next-door neighbors.

"INDIGOMODERN"

In addition to Barrio Metalico and the Ice House lofts, residents of Tucson are being treated to the third and most recent multi-family community designed by Paulus-INDIGOMODERN. The project is an eleven-unit phase one of a two-part campaign that will see 22 units mirrored on axis across the street from one another. Each residence is a cohesive 167 sq. m. (1,800 sq. ft.) of open and sustainable live/work and family space, all rolled into one.

INDIGOMODERN is organized along a north-south 55m. (180 ft.) "spine" that serves as access from the gated-off street parking to the units and community swimming pool in the more secluded rear of the

site. The unique layout creates a type of row-housing of separate, detached units whose towering walls provide shade and privacy to next-door neighbors.

The units are punctuated with light and offer private balconies with unimpeded, dramatic views of the majestic Catalina Mountains. Each space is a highly insulated enclosure, skinned with durable and recyclable materials and efficient glazing; mechanical systems have qualified each home for a \$2000 Federal Tax incentive. The units are 51% more energy efficient than the national average and are pre-wired for photo-voltaic power and pre-plumbed for solar water heat. Water harvesting cisterns are de rigueur.





"INDIGOMODERN is a 'green community,' from the landscape design and site to the sustainable materials of the architect's details," says Chicago architect John Burcher, A.I.A.. Burcher purchased the Paulus unit as a long weekend get-a-way from the chill of one meter (40") of 'Windy City' snow. "I have to say that my low utility cost reflects the discipline of the green design."

Architect Burcher points out that the project is an infill campaign. "Tucson is a community that needs to refocus



Il vialetto centrale, di 55 metri, che corre da Nord a Sud. Il canyon simile al Salk Institute rappresenta uno statementThe 55 m (180 ft.) north-south central semplice, ma efficace, di modern i s m owalkway. The Salk institute-like a rchitettonico solitamente noncanyon is a simple yet powerful riscontrabile su scala residenziale. Ilstatement of architectural Modernism punto terminale del vialetto è not usually found at a residential r a p p resentato dalla cappottatura di unscale. The terminus point for the t u r b o r e a t t o r e del diametro di 2,5 metri, central walkway is an 2.5 m. (8') d i rettamente dal 'cimitero' deglidiameter jet engine cowling straight a e romobili di Tucson. Ciascuna unit ò è from Tucson's aircraft 'boneyard'. dotata di uno spazio esterno privatoEach unit has a private outdoor space utilizzabile quasi tutto l'anno. for nearly year-round enjoyment.



La cucina a vista con 'isola' offre ampio spazio per la preparazione e cottura dei cibi. I confini tra interno ed esterno non sono definiti: qui la zona giorno si spinge oltre le pareti fino al patio. The open kitchen with island offers resident ample room for food preparation and cooking. Lines are blurred between interior and exterior: here the living space flows beyond the walls into the patio.



on the revitalization of its urban core. INDIGOMODERN reinforces the existing fabric of the existing neighborhood." Burcher praises Paulus for being a good advocate for this type of urban community development.

In the true manner of a pioneer, Architect Rob Paulus reflects upon his work. "We practice 'Responsible Density,' he says." We coined that term to define development within an infill neighborhood that pushes unit count beyond the norm, but within the context of great architecture. "With a touch of enthusiasm, this bass guitarist-violinist-architect says that 'Responsible Density' " encourages community because it brings people together, ...just like a good jazz session.