Roadside Redux

Retro Ice Cream Shop Serves Up Joy and Delight to Community

By Sarah Goldblatt, AIA



Thomas Fankhanel



Above: The oversize cream can designed by Ted Schultz, AIA, LEED AP, peers over the top of the former Olinger Mortuary building at the downtown skyline and pedestrian bridges that complete the link to the Highland neighborhood.

Opposite page: Crowds gather at dusk on a summer evening in the plaza that surrounds the lofty Little Man Ice Cream can. The striped awnings and large window openings that wrap the building create an intimate scale at the pedestrian level.

Right: The practical issue of fitting rectangular ice cream freezers and equipment in a 14-ft. diameter space was among the challenges that Schultz faced in the design process.

For years, Denver-based developer Paul Tamburello had a recurring dream that didn't fit into any of the archetypal dream themes of falling, flying or being chased. No, his dream was far more fantastic and fun! It involved a perfectly proportioned, bigger-than-life, vintage dairy can from which he could dispense his favorite flavors of home-made ice cream. Family stories of his mother's Depression-era childhood working and living in an ice-cream store in Chicago and his affinity for roadside architecture fueled his imagination. Plus he just loved ice cream. As a young adult Tamburello and his friends often tinkered with the classic ice cream flavors and invented new ones like strawberry with crushed Oreos®.

owever, the question lingered: when to shift his dream into reality? In 2007, as he completed the first phase of the adaptive reuse of the Olinger Mortuary property on 16th Street between Boulder and West 30th Avenue in Denver, he contemplated how to use a small triangular site where the angled downtown streets and the Highland grid collide, leaving an odd-shaped parcel of land. He looked at the burgeoning neighborhood, the adjacent pedestrian corridor and park and instinctively





Increase Hewison





Top: 4- by-8-foot metal sheets were welded, then temporarily strapped to the steel substrate to avoid oil-canning. Contractor Tom Hewitson of Miramar Construction developed a gauge or template to maintain the desired circumference as the steel was erected.

Center: The giant cream can top awaits a test fit on the body of the building. The cap was executed with exacting precision to match the proportion and details of a vintage cream can.

Bottom: The cap — with its "weathered" patina — waits on a flatbed trailer to assume its own landmark status in the Highland neighborhood. Historically, cable cars rattled past this site at the turn-of-the-century and were later replaced by streetcars.

knew this was the place to realize his dream of opening an ice cream shop.

The question shifted from when to how?

Architect Ted Schultz, AIA, LEED AP, regional office manager with CTA Architects Engineers in Denver, had collaborated with Tamburello on a number of successful projects in the Highland neighborhood that involved innovative juxtapositions of old and new. But when Tamburello presented his vision for an ice cream shop within an oversized cream can, Schultz admits that he was nervous at first and wondered, "Is this going to be appropriate in the city? It is too kitschy?"

Schultz consulted his copy of Denise Scott Brown and Robert Venturi's seminal book *Learning from Las Vegas* and determined that "we were making a duck ... there was no question what side of the line we were on." The term "duck" was coined by Venturi and Scott Brown to describe buildings that are often literal, albeit distorted, representations to communicate what they are selling. In other words, the building becomes the sign. This genre of architecture peaked between the World Wars when automobile ownership and highways were expanding at a rapid rate and attracting motorists was paramount.

Schultz looked at the series of pedestrian bridges linking 16th Street from downtown Denver to the proposed site and was intrigued by the potential reinterpretation of roadside retail. He began to see the project as "an opportunity to make people really happy, excited and to provide some unexpected joy and delight." His enthusiasm was only slightly tempered by the practical considerations: How tall should it be? What diameter? How do you get rectangular ice cream freezers efficiently in a round room? And ultimately, how do you build it cost effectively? The project evolved into an exercise in research.

While Schultz and project manager Jeff Belsick meticulously transposed the proportions and details of a vintage cream can that they had serendipitously found on a client's front porch into a two-dimensional, habitable space on paper, Tom Hewitson, general manager of Miramar Construction, was charged with bringing it to life. The team agreed that the design and execution had to be precise. Hewitson explains, "It had to look authentic and proportionally correct or the whole image would have fallen apart." They discovered, after contacting silo manufacturers in the Midwest and a firm out of Seattle that builds amusement park rides, that a 14-foot-diameter, 28-foot-tall cream can is not an off-the-shelf item. Schultz's hope that the structure could be "shipped out here in pieces like a big pipe" turned out to be unrealistic.

With pre-fabrication out of the question, they turned to local steel fabricators to do the skeleton and sheathing. Most wouldn't touch the project, but Western Steel and Boiler Co accepted the challenge. They worked closely with Hewitson to maintain the prescribed building curvature by developing a gauge to guide the steel frame construction. Six 18-foot-tall columns comprise the vertical structure and 2-inch flat stock on metal studs provide the substrate for the 4-by-8-foot, 16-gauge steel sheets that were tightly strapped and carefully welded to the circular structure to avoid any oil-canning.



As the building started to take shape, passerbys couldn't resist asking what was being built. Hewitson liked to tease rapt onlookers and often responded that the structure was "a grain silo, or water storage tank." When the window openings were cut in, he would say it was "a shark tank." Once the cap was placed atop the cylinder at the grand opening, the form was unmistakable.

It was the 14-foot-wide, 10-foot-high cap, replete with handles, rivets and banding, that represented the project's true labor of love. Not only did the cap contain challenging compound curves, Tamburello wanted the option to switch out the cream can top in the winter to transform the building into a soup can with a ladle. Ultimately the top was constructed to be convertible and contains an "eyelet" that allows a crane to lift off the 6,000-pound cap. Without a place to store the summer cap, the ladle idea has yet to come to fruition.

What has occurred is the successful insertion of an urban oasis filled with the delight of discovery and a new entry in the neighborhood's collective memory.

Above: The 6,000-pound cap was hoisted atop the cream can as part of the Little Man Ice Cream Grand Opening celebration. The architect designed the cap to be removable to allow the cream can to be transformed into a soup can with a ladle in the winter.

Below: A tangle of precisely curved steel tubes, pipe and bar stock comprise the cap structure.



LITTLE MAN ICE CREAM SHOP

Architect Ted Schultz, AIA, LEED AP, CTA Architects Engineers, Denver Location Highland Neighborhood, Denver Construction Cost Approximately \$200,000 Scope 182-square-foot ice cream store

Purpose Walk-up ice cream parlor in lower Highland neighborhood designed to resemble a vintage cream can **Completion Date** July 4, 2008

Owner Paul Tamburello

Contractor Tom Hewitson, Miramar Construction, Denver

Electrical Engineer Brian Kazin, P.E., Kazin & Associates, Lone Tree, Colo.

Structural Engineer Cody Bohall, P.E., Studio 8.18 Engineering, Denver

Interior Design Owner

Landscape Design CTA Architects Engineers, Denver **Awards and Recognition** Mayors 2008 Design Award

Other Notable Projects

- -Root Down Restaurant, Denver
- -Mayors 2009 Design Award
- -Comedy Works South, Greenwood Village, Colo.
- -Olinger Complex, Denver redevelopment of former mortuary into restaurants, retail and office
- -Mayors 2007 Design Award
- -Historic Denver 2007 Community Preservation Award

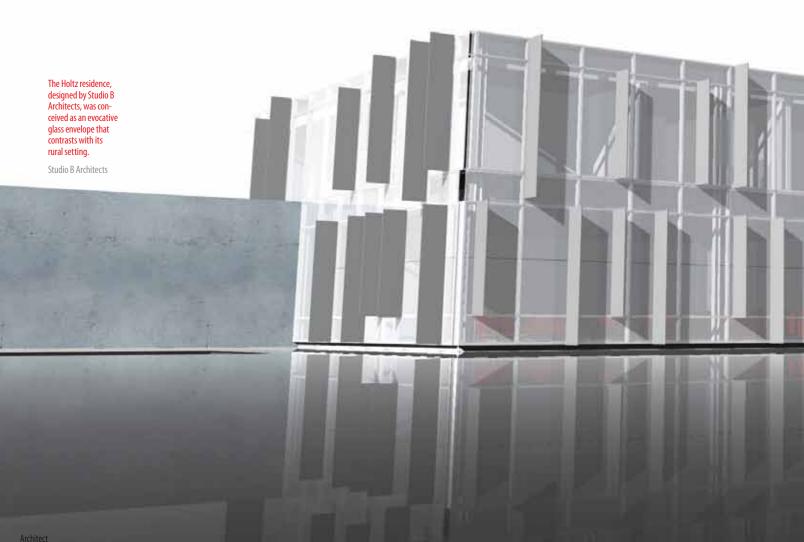
Below: The neon Olinger sign glances over at its new neighbor whose presence enlivens a once-empty corner lot in the lower Highland neighborhood.

Belsick describes the building "as a social piece as opposed to a simple destination." Schultz and his team carefully sited the building to be slightly offset from the 16th Street axis to establish an outdoor plaza bounded by the former Olinger buildings — and punctuated by the cream can. The orientation engages pedestrians on the sidewalk, allows for movable seating and accommodates long lines of patrons in the summer. And while the sheer scale of the building dominates the initial experience, the smaller details are revealed over time. These include the Streamline Moderne red vinyl stools that wrap around the structure, the ribbing on the stainless steel counters, and the colorful striped awnings. The hand-made nature of the building extends to the finish that has been carefully painted to recall a weathered cream can with a slightly worn label.

Although surprisingly hidden from view from most vantage points, the top of the cream can becomes visible just over the crest of Tejon Street and provides a visual connection to the downtown skyline. Myriad other subtle references link the cream can to the neighborhood's history, one marked by consistent change. For all its whimsy, the Little Man Ice Cream Can may possess that elusive, enduring quality of being able to create humorous relief from our hectic daily lives and respite from the once sublime act of travel. It achieves the intent of roadside architecture, perhaps only in reverse.

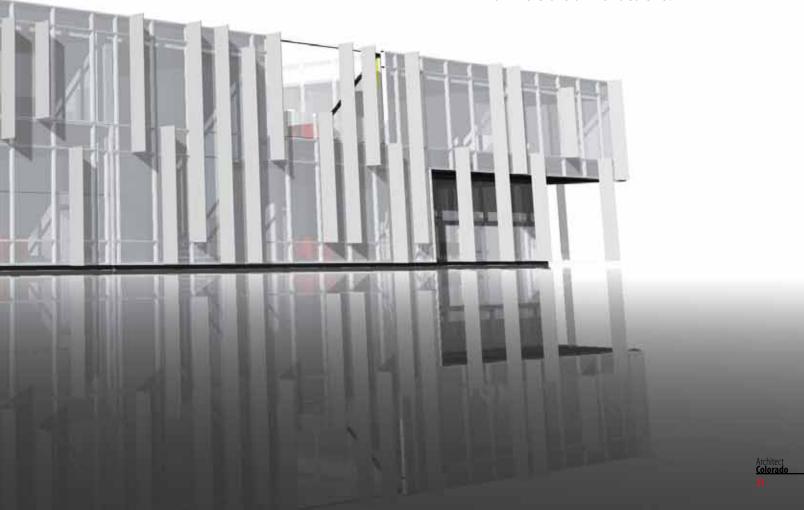


effrey Belsick



Advances in Building Science and Technology Allow Architects to Transform Vision into Reality by Sarah Goldblatt, AIA

The modern aesthetic of the unadorned box that cleanly expresses structure as ornament or diminishes it altogether to become a transparent envelope is again the prevailing language of the design vanguard. While many contemporary architects are paying homage to the progenitors of Modernism in America by designing with glass, steel and concrete in functional and logical ways, that is where the similarities end.



The difference? Technology.

The environment that Le Corbusier envisioned when he referred to buildings as "machines for living" can now be realized with livable results. Building science and technology is moving in stride with architectural innovation, although admittedly not at the same pace in the United States as elsewhere in the world. Eco-efficient design, also at the fore of architectural exploration, has deep roots in Europe and is now finding traction in the United States.

Two Colorado architects, one practicing in the high alpine regions of the state and the other in the plains and foothills, have each pursued a combination of architectural innovation and experimentation that has caused them to look beyond traditional building materials and to push the limits of technological possibilities.

The Art of Living

In a place where most people associate home design with the heavy timber mountain vernacular or gingerbread Victorian, the thread of Modernism runs surprisingly deep. Bauhaus Modernist Herbert Bayer left an indelible mark on Aspen, Colo., that continues to influence contemporary design in the region today.

Aspen residents Toni and Daniel Holtz had a permit in hand for the construction of their new home on a majestic home site in Old Snowmass when they contacted Scott Lindenau, AIA, design principal of Studio B Architects, for help. The problem? The original design, conceived by another architect, did not meet their ideal vision of home, and they were not prepared to compromise. As avid collectors of contemporary art, they longed for the translation of their aesthetic preferences into the architecture of their home. The catch? The footprint was immutable locked in by previous approval processes. Only the building skin and interior layout were open for discussion.

As a point of departure, the Holtzes referenced Herzog and de Meuron's design for the Dominus Winery in Napa Valley, where innovative materials were used to integrate the crisp rectangular

building into the natural landscape. Lindenau quickly found that he and his clients were in sync. His philosophy that "architects should not reinvent the past but interpret the future utilizing not only technologies at hand but researching new ideas" launched a design exploration that resulted in a vastly different solution for the Holtz residence.

provoking." "Like art," he continues, "I want the piece that constantly reminds you of what an elusive element art is, rather than having someone simply walk by and not notice that it is there."

Studio B's design for the enclosure and minimalist floor plan exceeded the clients' wishes for a home that expressed their aesthetic sensibilities. However, the glass façade

"...architects should not reinvent the past but interpret the future utilizing not only technologies at hand but researching new ideas..."—Scott Lindenau, AIA

Instead of a structure that assumes the nature of its context, Lindenau designed a glass-skinned envelope that reflects and absorbs the surrounding alpine landscape like an artist's canvas. The structure is slipped behind the buttglazed curtain wall system to allow for unobstructed views of Mount Sopris and the Elk Mountain Range. Comparing the design to the evocative nature of the conceptual art that he and his wife enjoy, Daniel Holtz describes it as "thought-

had to be fine-tuned to protect the art and prevent thermal extremes. Fortunately, current glazing technology allows nearly every climatic condition to be addressed without compromising transparency. Lindenau consulted glass specialist James Carpenter — who has worked with Shigeru Ban and Frank Gehry — to distill the glazing concept. He also applied a lengthy solar analysis to study the sun's movement across the site throughout the year to model how shadows were cast on the interior.



Studio B Architects



A combination of films, coatings and tinting was being considered, along with vertical glass fins to mitigate internal heat gain. The narrow fins, attached to solar-activated pivots, provide modulation and texture to the smooth exterior while transmitting long shadows to shade the interior.

To further push the literal technological boundary, the owners requested that a large portion of the glass skin open up to blur the boundaries between inside and outdoor living spaces. Aircraft-hangar doors on a hydraulic system were specified to achieve the effect. "Coordination and collaboration among consultants is paramount to achieving a high-performing building enclosure like this," project architect Noah Czech observes.

Though the house may seem to employ extreme measures to achieve comfort and delight, Czech comments, "We didn't reinvent anything; we just used materials and

The Alpine
West house,
designed by Studio
H:T, was an ideal
candidate to test the
capabilities of the
WeberHaus prefabrication system with
its linear, volumetric
form and optimal
solar orientation.

Studio H:T



applications that you find everywhere — except in residential design."

The Green Standard

John Goodson is a software consultant who seeks quality. The same quality he exacts from his software products now guides his other interests, particularly a development venture focused on the construction of hyper-energy-efficient homes. When building his own Boulder residence, he was introduced to a German WeberHaus prefabricated system that is precision-crafted and touts only 18 percent of the average energy use of a conventionally built home.

A hyper-energy-efficient home exceeds standard energy-efficiency levels through the intelligent application of prefabricated construction technology. These methods effectively reduce a home's carbon footprint to a trace without compromising quality. Not surprisingly, this system is a product of Germany's long-standing commitment to sustainable design strategies. While the concept of prefabrication may sound familiar, the product is anything but ordinary.

The reason? "Germany just didn't have the natural resources to be as wasteful as the United States," describes Goodson on the disparity of home building practices between the two countries. "For years," he continues, "the Germans have fine-tuned the process of building houses with minimal waste, making them perform as efficiently as possible." Goodson adds that "homes in Germany are built for a hundred-year lifespan and passed between generations."

With construction waste of a hyperenergy-efficient home at less than 2 percent as compared to a stick-built home that produces nearly 17 percent waste, Goodson's team felt that green-centric

Holtz Residence



Architect: Studio B Architects Scott Lindenau, AIA, design principal Noah Czech, AIA, project architect **Location:** Old Snowmass, Colo.

Scope: 13,000-square-foot house on 25 acres

Purpose: Single-family residence

Owner: Danny and Toni Holtz **Contractor:** Brikor, Aspen, Colo.

Electrical Engineer: Robert Singer + Associates, Aspen, Colo.

Structural Engineer: KL+A, Inc. **Interior Design:** Studio B Interiors **Lighting Design:** Studio B Architects

Landscape Design: BlueGreen LLC, Aspen, Colo.

Other Notable Projects by Studio B Architects

Christ Episcopal Church, Aspen, Colo.

 $\label{thm:condition} Aspen\ \mathsf{Middle}\ \mathsf{School}\ \mathsf{in}\ \mathsf{collaboration}\ \mathsf{with}\ \mathsf{Hutton}\ \mathsf{Architecture}\ \mathsf{Studio}, \ \mathsf{Aspen}, \ \mathsf{Colo}.$

Jussila Residence + Kukkula Winery, Paso Robles, Calif.

Baobab House, Livingstone, Zambia Scholl Residence, Aspen, Colo.

Aspen Fire Protection Districts headquarters station, Aspen, Colo.

Boulder, Colo., would be the perfect test market for the German WeberHaus prefabrication system.

Boulder-based Studio H:T principals Brad Tomecek, AIA, and Christopher Herr, AIA, had designed the contemporary

"There is no longer
a barrier between
architectural ambition
and environmental
conscience."—(hristopher Hawthorne, Los Angeles Times

Alpine West house in north Boulder for a developer. The home cascades down and across its steep, pie-shaped site to capture panoramic views of the Flatirons and the surrounding landscape. A series of crisp, modern "boxes" clad in stucco and glass were conceived to slip past one another as the house becomes increasingly more transparent as it telescopes toward its southern exposure.

The recent economic downturn temporarily stalled the project until Studio H:T began collaborating with Goodson's development team. With their shared interest in sustainable design and modular construction, the group selected the Alpine West plan and site to adapt to the German WeberHaus system.

Tomecek explains that "the WeberHaus method offers a fully cus-

Alpine West House

Architect: Studio H:T **Location:** Boulder, Colo.

Scope: Project design/factory coordination

Purpose: Hyper-energy-efficient single-family home

Completion Date: May 2010

Owner: J. Goodson

Contractor: Vireo, Boulder, Colo.

Mechanical/Civil/Electrical Engineer: Boulder Engineering, Boulder, Colo.

Structural Engineer: WeberHaus, Germany

Interior Design: Studio H:T **Factory:** Weberhaus

Other Notable Projects by Studio H:T

Box House, Boulder, Colo. 32nd Street Modular, Denver Shipping Container House, Nederland, Colo. Shield House, Denver

tomizable panelized system that allowed us to adapt our design with very little impact." Tomecek and Herr traveled to Germany to convert the plans to metric, make adjustments for load calculations and specific factory standards. In a little over three months after factory approval, the project arrived in 10 shipping containers, along with a German crew and crane to erect it.

Within nine days, the home was assembled and ready for local trades to connect

the infrastructure preset in the panels. The quality and precision of the German engineered system is apparent in the tripleglazed windows with a 0.21 U-value that come standard in the R-38 wall assemblies. Targeting LEED Platinum certification although the home may exceed it — the house boasts a 9.25 kW solar photovoltaic array, a solar hot-water system that supports the radiant floor heating and domestic hot water needs and a graywater treatment system. Interior material selections are non-toxic and certified sustainable from renewable resources. The house can even be recycled and moved to a new location. The result? A green tour de force. As Los Angeles Times architecture critic Christopher Hawthorne observes, "There is no longer a barrier between architectural ambition and environmental conscience."

Indeed, current technology has facilitated the fusion of glass and sky, art and architecture, eco-efficiency and design innovation with no apparent performance limitations.



The home's interior spaces are oriented to capture ever-changing views of the Flatirons and surrounding land-scape. All specified materials and finishes are non-toxic and from certified renewable resources.

Studio H:T