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## CONTEN JULY/AUGUST

# Shop 'Til You Drop

Whether you like to shop or have to be dragged to the store, retail is a vital part of our society. As store construction increases, examples of growth in the retail market can be seen all over the country. By Kate Gawlik

52 Steeling Gems shows how the Brodie Lane Branch of University Federal Credit Union, Austin, Texas, has redefined the banking business as retail. The architect designed a clever steel and glass structure that is used as a marketing tool. By Sara Fernández Cendón

58 Retail Projects highlights retail spaces designed to entice shoppers.

#### 100 **Fall Protection: How** Much Do You Know?

Falls are the No. 1 cause of death each year throughout many industries. Understanding fall-protection options is vital to keeping workers safe. By Kelly Pieters

# Steeling

### CONVENTIONAL CONSTRUCTION RETHOUGHT



By Sara Fernández Cendón

earing architect Michael Antenora, president of Antenora Architects LLP, Austin, Texas, talk about leaning walls for the first time may have sounded like nails on a chalkboard to project engineer Chuck Naeve. But Antenora's enthusiasm is contagious, and the walls went up. There still is no shortage of words as the architect describes the features of this remarkable little building in light of its relatively low cost.

And reasonable cost aside, the Brodie Lane Branch of University Federal Credit Union (UFCU), Austin, could in fact be described as the building version of a gem.





#### RETAIL

The cut, an exposed steel structure, creates shape and light-reflecting angles. The wall system, like a series of glass facets, produces versions of life inside the building to be contemplated most profitably from the unique perspective of an outsider looking in.

Like a gem, this building was crafted to catch eyes and steal hearts. But in true modernist spirit, Antenora designed a structure that also is efficient: a structure quite fittingly meant to represent his client's business strategies but also fully equipped to serve the needs of UFCU members in southwest Austin.

#### RETHINKING THE BOX

The unusual shape of the structure alone presented a substantial challenge in all areas of the project. This small building rises in such an improbable stance that Antenora somewhat jokingly compares its sloping sides and roof to the problematic cupola of Florence's Cathedral.

Like the Florentine architect who eventually gave the monumental Cathedral a dome, Antenora encouraged everyone involved in his admittedly more modest project to rethink conventional construction techniques, systems and materials. "The biggest challenges of this project were shared equally in architecture, engineering and construction/fabrication/erection," Antenora explains. "In creating and constructing this design, we challenged the entire project team not to 'think outside the box' but rather to 'rethink the box.' We asked nearly everyone—the steel erectors, curtainwall manufacturers and installers, etc.—to push the boundaries of where these common materials could be taken."

#### STEEL

Antenora conceived a modern design to match his client's sense of its own business practices, but structural steel was a natural choice for several other reasons. First, steel's strength in tension and compression was an invaluable partner in achieving Antenora's vision. Rendering the leaning curtainwall system in any other material would have produced a heavier, less graceful solution. Secondly, the ability to have the steel structure fabricated off-site and erected quickly and accurately reduced costs and time. According to the architect, the building was quite economic; its cost approaching, and in some instances not even reaching, the average cost of comparable buildings in the area.

Antenora attributes the success of this project to a constant and

open flow of communication between his firm and the owner; the engineers; the general contractor; and all the subcontractors, especially the steel erectors. Construction Metal Products, Kyle, Texas, served as the steel subcontractor and erector. The company provided fabrication and erection for structural, ornamental and miscellaneous steel products.

Construction Metal Products' efforts deserve special mention for no small reason: the structural frame for the glass lobby space is completely exposed. "Every weld is exposed, and every joist is exposed. Some people have described this, and J agree, as a very 'honest' building," Antenora says.

Such "honesty" demands a degree of attention to craftsmanship not typically found in projects of this scale. "Great care was taken to detail the connections to be visually, as well as structurally correct," Naeve notes.

Even the type of primer and paint were carefully chosen because the typical red-oxide primer used by the fabricators is not compatible with all paints.

The exposed structural frame also created some critical scheduling intricacies that were handled successfully through very detailed construction documents and specifications, as well as well-conceived shop drawings and erection strategies. The complex geometry was confirmed in the shop drawing and fabrication phases to facilitate erection. Once erected, the steel structure became the base line for the application of the window-wall and building finishes. Antenora recommends determining upfront the shapes, members, pieces and parts to be custom fabricated, as well as those to be "stock" items. He says lead times and availability for each of those parts must be considered in scheduling deliveries and installation.

#### GLASS

The glass building posed a significant challenge in terms of heat gain and glare. This was a challenge Antenora addressed on several fronts to remain well within city standards for energy consumption and proudly report that, in spite of all the glass, this building is no more costly to operate than other buildings of comparable size.

Resembling air-traffic control towers, the tilted glass structure was designed to eliminate heat, sunlight and glare while extending the presence of the building at the busy intersection on which it is located. The roof projects beyond the sloping columns and walls; steel sunscreens provide additional shading for the building and double as walkways for window washers, who may perform upkeep

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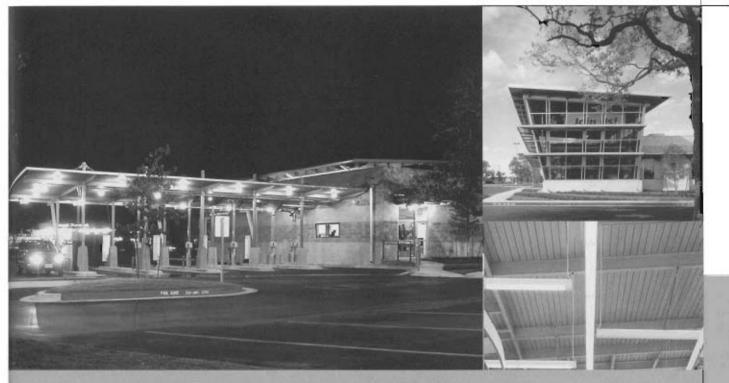












THE GEMS. Everything in the lobby area, starting with an elliptical greeter's desk, subtly encourages customers to surrender to this natural impulse and rewards their compliance with efficiency. Safety and efficiency lie behind the decision to install video tellers and the pneumatic tubing that connects the entire internal network. Acoustic metal decking was installed to keep decibel levels down inside the hard, glass-and-steel structure.

duties aided by an extension ladder, And for another curious instance of duality (and another resourceful use of steel), consider the stainless-steel cables stretched between the roof and foundation of the building, which serve to hold the steel sunscreens up and counteract wind-uplift effects by anchoring them down.

The sunshade devices stratify the glass storefront into three parts. The glass on the lower two-thirds is slightly shaded to provide additional protection against glare, but it is revealing enough to showcase the bottom third—the lobby area—as an inviting place where people interact. The middle third serves a general utilitarian purpose. And the glass on the top third of the building, which is clear, encloses much coveted billboard space and allows UFCU to remain safely within city signage ordinances because promotional signs are displayed from inside the building.

#### → INTERIOR

The ease with which UFCU members negotiate their transactions inside the building is much more apparent than any of the design elements worked into the space to produce such an effect. Antenora and his client noticed that customers naturally tend to follow an elliptical path as they go in and out of a bank. In a lively application of this casual observation, everything in the lobby area, starting with an elliptical greeter's desk, subtly encourages customers to surrender to this natural impulse and rewards their compliance with efficiency. Consistent with Antenora's overall deliberate concept, the ellipses extend into the surrounding landscape (executed in "low-water-usage"), which pulsates in the various shades of green of the native

plants, grasses and trees used for its design.

Safety and efficiency also lie behind the decision to install video tellers and the pneumatic tubing that connects the entire internal network, another way in which this building merges design vanguard and the kind of lucid sense that aims at making life simpler. The architect's intense attention to detail, which in this building took shape in countless other ingenious features, such as the acoustic metal decking designed to keep decibel levels down inside such a hard, glass-and-steel construction, won his firm a Certificate of Excellence in Construction for this project from the Central Texas Chapter of the Associated Builders and Contractors.

#### A TRUE STEAL

The initial drive for this project was two-fold: to meet the needs of UFCU members in an underserved but fast-growing area of Austin and attract customers to a banking business that was seeking to redefine itself as retail. The former was addressed quite simply by opening a highly efficient branch in the area in question while the latter justified Antenora's clever use of steel and glass as marketing tools.

UFCU wanted a very visible building on a very prominent intersection in southwest Austin. The company's desire resulted in the kind of building that you cannot miss—a brave navigational landmark that signals the possibility, if not the advent, of an urban environment in which even the most habitual of interactions can take place in smart, graceful spaces. In

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