

# ALAMO BEER COMPANY

San Antonio, TX



Created in Coordination with Lake|Flato Architects

Photo courtesy of Lake|Flato Architects

Photographer Casey Dunn



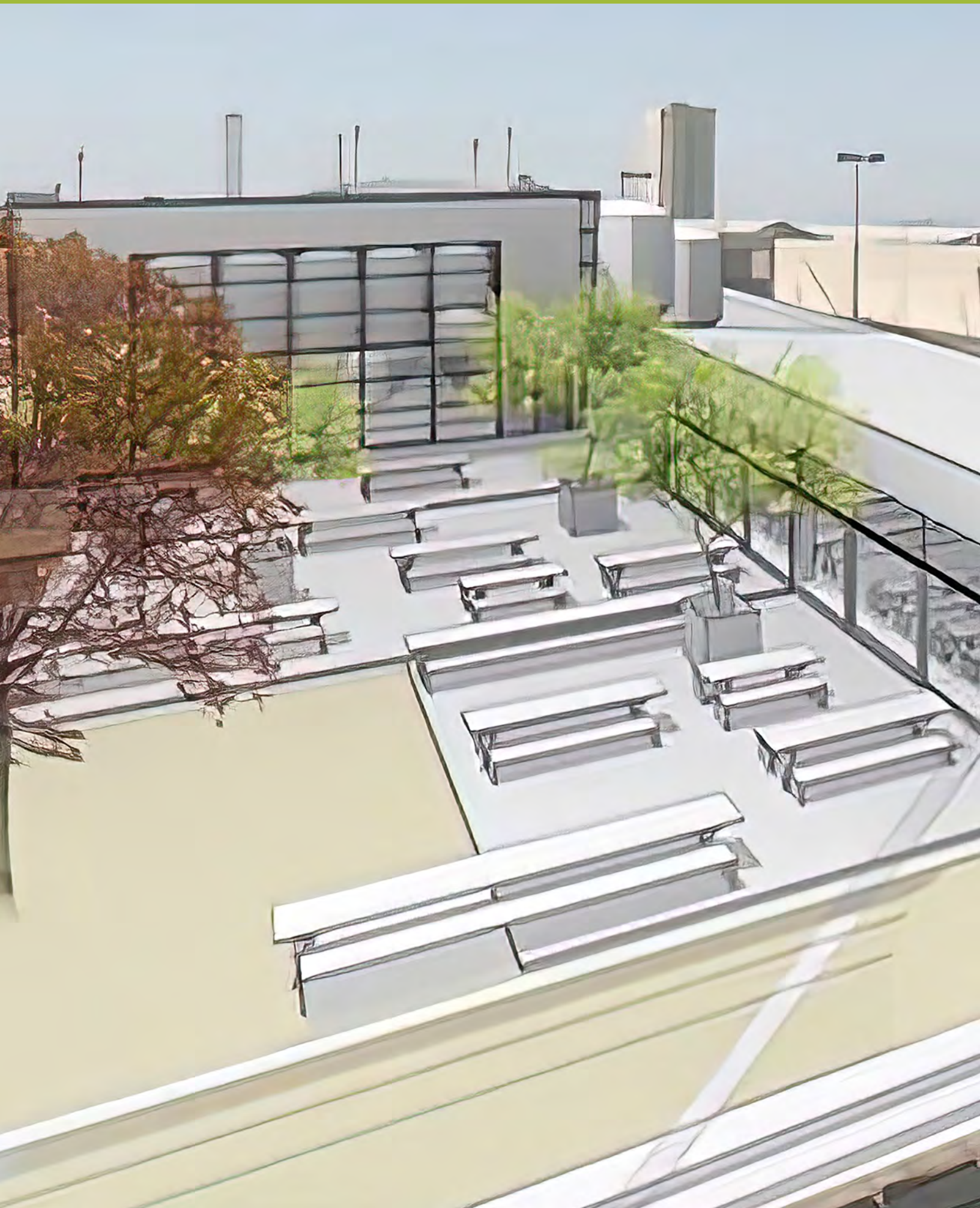




Photo by Scott Stephen Ball

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# PROJECT DETAILS

**Title:** Alamo Beer Company

**Designers:** Lake|Flato Architects

**Engineers:** CNG Engineering, PLLC (CNG)

**Constructor/Erector:** Guido Brothers Construction

**Client/Owner:** Alamo Beer Company, Eugene Simor, President & CEO

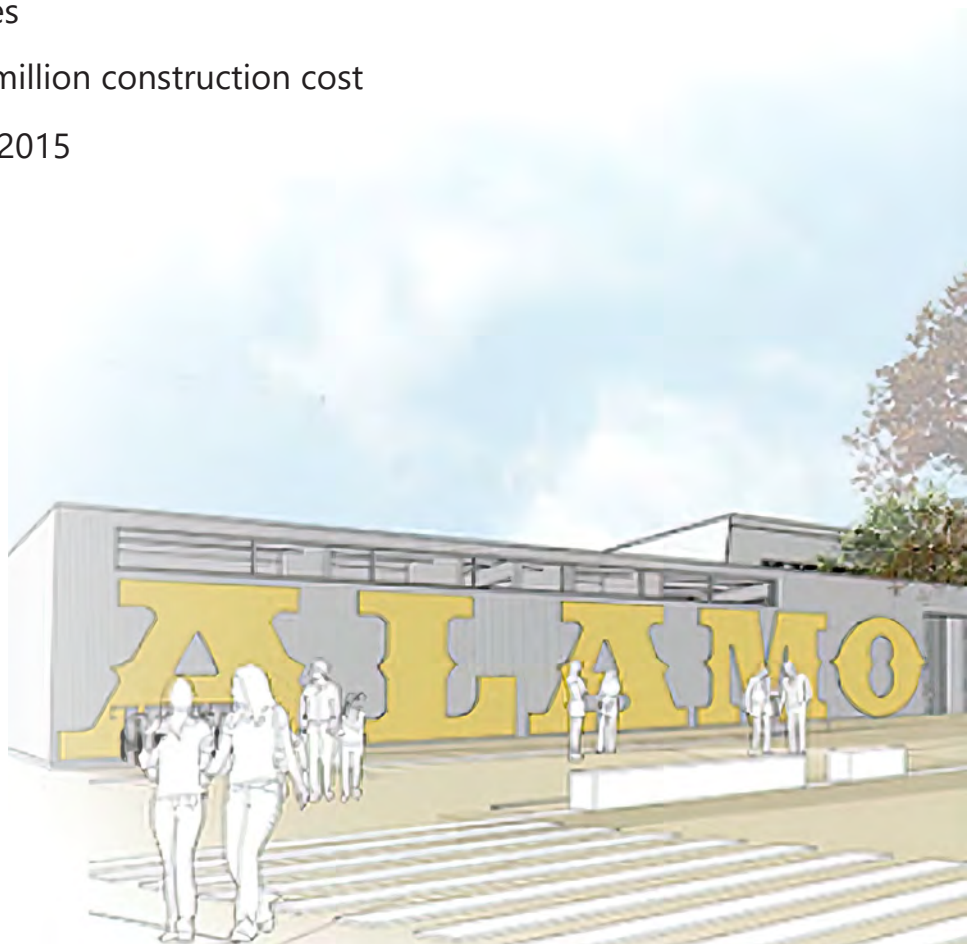
**Building Function:** Brewery operations, administrative offices and beer hall structures

**Location:** San Antonio, Texas

**Site:** 1.89 acres

**Budget:** \$3.5 million construction cost

**Completion:** 2015

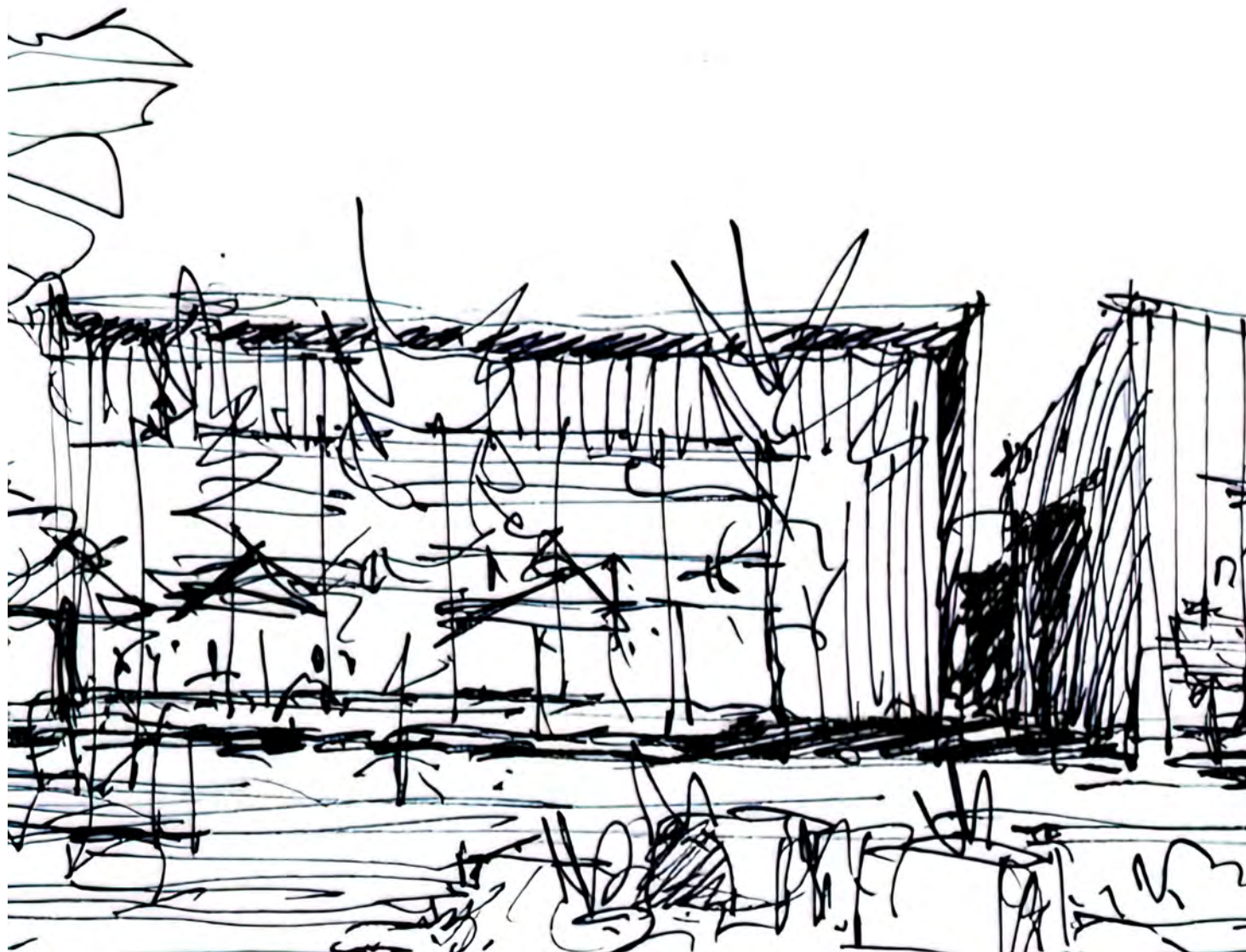








# PROJECT DESCRIPTION





“Rather than integrating into the natural environment, the Alamo Beer Brewery makes itself a valuable part of the San Antonio urban setting. The emphasis here is not quite as much on the buildings themselves, though they do carry Lake|Flato hallmarks such as their high windows, rustic color scheme and interspersed greens. It’s more about what the buildings are designed to have people do: come together. The structures all face the central area, which encourages people to eat, drink, socialize and have a good time outside. Employees have cause to walk from building to building as they go about their duties, potentially mingling with customers. Even if people don’t go there to buy drinks, there is space out front for activities such as tossing a frisbee. The buildings serve more than just the business; they serve the community.”

- Brennan Connolly  
Architecture Blogger

## Overview

Winner of an AIA San Antonio Design award, among others, the 18,000-square-foot Alamo Beer Company building complex and outdoor biergarten are uniquely positioned as a gateway to a growing neighborhood and as a catalyst for urban revitalization.

Appearing as an extension of the historic Hays Street pedestrian bridge, its red rust-colored and warehouse-like façade, consistent with the building's industrial surroundings, makes the brewery a thread in the neighborhood's existing historic fabric.

The multistructure complex is organized around a central gathering space, connecting brewery operations, administrative offices and beer hall structures, all crafted by incorporating a customized metal building system. Architectural elements were added to the building skin, such as large, perforated,

corrugated and light transmitting panels. Steel reclaimed from a nearby historic manufacturing facility was used to fabricate the brewery's iconic big barn doors and other trimmings.

Designed for high performance, the brewery production facility is the largest structure and operates without air conditioning. The building tempers the interior space with the barn door openings, intake louvers, exhaust fans and operable windows, reducing energy consumption dramatically, with an overall project energy use intensity (EUI) 77.4% lower than similar building types. The brewery also has a 64 kilowatt photovoltaic (PV) array which reduces heat transfer into the building and provides approximately 23% of the operation's power.



Photo by Ernie Roman

"The microbrewery is cozied under the historic Hays Street Bridge and is a landmark project on the East Side of downtown San Antonio as it brought enterprise and new jobs to the East Side."

Guido Construction website





Reclaimed steel from a nearby historic manufacturing facility was used to fabricate the brewery's iconic big barn doors!



## Design Priorities

1. Create a highly versatile space that accommodates diverse production and retail expectations.

In this case, a metal building system was an appropriate building application because, as Lake|Flato Partner Greg Papay, FAIA, explains, “You can do almost any span you want with a metal building system because it’s a really flexible system. You can do a 30-foot-wide building (which is what the office building is) or you can do a 60- or 70-foot-wide building (which is the production facility), and you can make those spaces 12 feet tall or you can make them be 30 feet tall. Without having to shift from one structural type to another, you can use that same system. So, there’s a consistency and there’s an economics that goes with that, but there’s also an architectural language consistency that we like. Even though you’re moving from radically different spaces, they do have a connection from one structure to another.”

2. Create a design to accommodate the potential and anticipatory needs of an owner who could not yet determine the expectations for the facility over time, since many variables would impact the growth of the business.

Per Papay: “Our client obviously, on day one, was not able to fill the building with tanks for what he thought his ultimate production capacity was going to be. He wasn’t brewing that many barrels when the building opened, but he wanted to add capacity over time. We were able to create a section of the building where you can literally—and he’s done this now a couple of times—remove the façade, unbolt some of the wall purlins and then you can slide in extra tankage to increase the overall capacity of the building. With almost any other building system, that’s a really difficult thing to imagine.

3. Develop a design that will result in a low-maintenance façade that can weather South Texas storms and withstand a variety of climate impacts.





Papay affirms that a designer doesn't have to encase a metal frame with a metal skin, "but our sense was that we wanted something durable," he says. "We chose a corrugated skin so it could take a bump or a bruise pretty easily without looking like it'd been beaten up badly; and then we chose the Corten material so it would weather once and never have to be significantly maintained over its life. The panels are also lightweight. Metal buildings are generally pretty light buildings compared to concrete frame or masonry structure buildings. All of that translates to slightly less load on your foundation systems, and it lowers the overall structural costs of the project."

4. Create an environment that allows three structures with completely different uses to function as a cohesive unit that meets both functional and aesthetic expectations.

The three components include an office building, a beer hall and a production brewery. By flowing the structures around a courtyard, all elements were brought together and made cohesive. Per

Papay: "The two small pieces were the office building and the beer hall. The production brewery is this kind of doorstop wedged shape of a building where everything is lined up based on the height of the tanks that are on the inside. There's a specific process by which beer gets made; the building is responding to that and is influenced by the scale and the size of the tanks. The building flows from the initial tanks to the bottling line, and then the canning and packaging are all at the low end of the doorstop where you don't need a lot of height. But the 25- and 28-foot-tall tanks are all on the high end of the site, and those are the cool things to look at, so we positioned them behind a huge window on the courtyard where you can look in and see the production going on. It all seemed to fit together really nicely."





# PROJECT GOALS & OBJECTIVES



Photo courtesy of Lake|Flato Architects      Photographer Casey Dunn

*Create an environment that epitomizes efficiency for the brewing production facility.*

Papay explains: "Functional flexibility is particularly important for breweries that grow over time. Metal buildings can be easily adapted to shifting height preferences, accommodating high spans for brewing tanks and large openings like the Alamo's oversized sliding doors and large ceiling fans. In addition, a metal building system allows you to integrate elements of size and scale. This ability to deconstruct and reconstruct the building when you need to adapt it for increased production was a pretty critical concept in using the system."

*Design a space that required the least amount of energy consumption and expressed environmentally responsible attributes.*

A lot that goes on inside a brewery building requires a heat intense process, yet the designers were able to keep the space comfortable without air conditioning by recommending massive ceiling fans and huge sliding doors that can be opened to enhance natural ventilation. Papay says, "You wouldn't have thought it, but it's actually a very sustainable solution from a brewery standpoint."





Photo courtesy of One80 Solar

Another energy-saving design decision involved the use of a solar array which incorporates 256 solar modules placed in the shape of the Alamo and spans 5,000 square feet on the brewery roof. Its 250-watt modules were manufactured in the United States. This solar art is expected to produce 90,000 kilowatt-hours of electricity per year and save about 414 tons of carbon dioxide emissions in its first 10 years of production. "The array will pay for itself in four to five years, resulting in free power from the sun for at least the next 30 years," comments Andrew Anguiano in [CraftBeer.com](http://CraftBeer.com). "This makes Alamo Beer Company an

industry pioneer, merging innovation with results." To give a sense of the scale in the photo above, note that the star in the middle is 12 feet tall. The solar panels are attached to aluminum rails, which are attached to feet that are fastened through the roofing panel.



Photos courtesy of Donna Kacmar

## Managing the Balance Between Vision and Expectation

An important and often extremely time-consuming element of an architect's work involves maintaining the delicate balance between the project vision and the expectations of those most impacted by the unbuilt structures that will change the landscape within a community.

When Eugene Simor began his journey to build his brewery, he planned to construct it on the north side of the Hays Street pedestrian bridge. He purchased land from the city of San Antonio for \$295,000 and received an \$800,000 incentive package from the city as well. Once the land was procured, Simor made plans to add a restaurant beside the proposed brewery that would connect to the bridge. He hoped to use part of the bridge as an outdoor restaurant feature. Simor told the San Antonio Express-News that access to the bridge was critical to his plans. "The bridge itself is an elevated, linear park, and for people to be able to enjoy it, it makes sense to

have a limited amount of dining opportunity. No different than what you see at El Mercado, the River Walk or several places on Houston Street."

But his plans to develop the land on the north edge of the bridge faced public concern and plenty of controversy. The Hays Street Bridge Restoration Group had invested years of effort to rehabilitate the landmark structure. The group sued the city, asserting that it could not sell the land to a private developer because it was to be designated for public park use.

The case went to trial and a jury agreed with the stance of the restoration group; however, the city chose to continue to still sell the property to Simor and also appealed the ruling to the Fourth Court of Appeals. The dispute was eventually resolved through mediation.

Fortunately, Simor had purchased land on both the north and south sides of the bridge; so, the initial architectural drawings for the north side property





were scrapped and new plans were developed for the south side. "The site of the project ended up happening a little differently than what we'd imagined, but that south property was the perfect scale for what he was trying to do," explains architect Papay.

## Contextual Considerations

Exterior visual appeal was a key concern for this property, which essentially marries the industrial warehouse community on the south side of the Hays Street pedestrian bridge to the upscale, downtown ambiance on the north side of the bridge. Lake|Flato emphasizes that its corporate culture embraces a commitment to location-inspired design and this project brings that commitment to light.

Says Papay, "The choice of the metal frames and the choice of the Corten skin, all of that was really playing on being next to the bridge, which has this under structure that looks very much like the structure of a metal building. And, the buildings are adjacent to railroad tracks so you have these rust-

colored box cars that go flying by every 30 minutes. So, for us it was natural to make this a rugged-feeling community of buildings. The context of the space truly led us to this choice of just leaving the frames primed and having all the skin be a Corten skin that would just rust out and then be there for decades with essentially no maintenance. And it just fit. It fit this quirky context of this fun pedestrian bridge and the railroad cars and these other warehouses that are adjacent to his property, so it all came together through the contextual framework inherent in the design."

## RELEVANCE FOR STUDENTS

Architecture is a profession that blends art and science to create unique building solutions. While noble, it is also a career that can bring great pride to you, the practitioner. In fact, countless architects, engineers and constructors have voiced such pride in observing their own work. Recently, one design professional commented, "Every time I cross this bridge with my family in the car, I tell them how exciting it was to build it and I tell them some of the challenges we faced that ultimately made it a hugely rewarding job." Another says, "I can't look at that building without feeling a deep sense of satisfaction. For all the hours it took to bring it to life, the challenge was worth every minute." And still another says, "I look at that building and I say, 'That's my building,' because I put so much heart and soul into making it come to life. It's beautiful."

In the case of Alamo Beer Company, the architect's satisfaction came from a different direction. Architect Papay explains, "My college roommate, Eugene Simor, actually started Alamo Beer some years ago. He was doing some development work and had always been into craft beer and got this idea that he wanted to open a brewery. For a few years, he had his beer contract-brewed out of another local brewery on the north side of town. His goal was always to create his own brewery both for the production side of things and also to make it a fun public venue for San Antonio. Helping my friend and former roommate to achieve his dream by using my skills and the skills of my team at Lake|Flato has been a tremendously rewarding experience for me, personally and professionally."



Photos courtesy of Lake|Flato Architects      Photographer Casey Dunn



## Practical Application

1. How were the solar panels attached to the Alamo Beer Company roof? What options were there in terms of attachment and which solution is most practical?
2. The exterior of a metal building can be clad with virtually any material such as brick, precast concrete, stone, wood or glass. Would the buildings have made a substantially different architectural statement if one or more of those products had been chosen for the façade?
3. Both the IECC and ASHRAE 90.1 have prescriptive insulation requirements specifically identified for metal buildings because the codes were written to allow that there are alternative approaches to design and construction using metal building systems. How does using prescriptive methods impact how an architect plans for building insulation criteria?
4. Advancements in the fabrication of structural elements provide a faster return on investment for a building owner than some other forms of construction. How is a metal building fabricated and how does the ability to pre-cut and pre-punch building components under precise factory conditions impact the speed of construction?
5. Since the plan is in place to expand the brewery over time, how can one wall of the building be removed and new walls added to the structure without impacting the integrity of the primary structure?





# RESOURCES/RELATED READING

<https://www.craftbrewingbusiness.com/news/alamo-beer-begins-construction-san-antonios-largest-craft-brewery/>

<https://architizer.com/projects/alamo-brewery/>

<https://www.craftbeer.com/news/brewery-news/alamo-beer-company-crafting-beer-with-solar-art>

<https://www.guidoconstruction.com/alamo-beer>

<http://fa2016.thedude.oucreate.com/uncategorized/alamo-beer-brewery/>

[https://issuu.com/lakeflato/docs/development\\_hospitality/33](https://issuu.com/lakeflato/docs/development_hospitality/33)

<https://blogs.scientificamerican.com/plugged-in/turning-utility-into-texas-size-solar-art/>

<https://www.craftbeer.com/news/brewery-news/alamo-beer-company-crafting-beer-with-solar-art>

<https://www.expressnews.com/food/article/Alamo-Beer-opens-to-public-6119805.php>

## Video resources at [www.youtube.com/mbmamedia](http://www.youtube.com/mbmamedia)

[How Its Made: Metal Building Innovations are Revolutionizing Low-Rise Commercial Construction](#)

[How Its Built: Metal Building Construction Raises the Bar for Low-rise Commercial Structures](#)

[Introduction to Metal Building Systems](#)

[Metal Building Systems 101](#)



Photo courtesy of Twenty Something SA

"It's a bit overwhelming. When we were designing the building and everything, seeing it all on paper is one thing. You really don't get a feel for the size and scope of something until it's finished and you're actually walking around and saying, 'Oh my God, this place is huge.' And then that's usually followed by me saying, 'I've got to sell a hell of a lot of beer to pay for it.'"

Owner Eugene Simor, as quoted in the  
San Antonio Express-News





Photo courtesy of Lake|Flato Architects      Photographer Casey Dunn

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