

# Manufacturing Facilities on a Budget Can Feature High Design



Architecture  
Interior Design  
Planning

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Manufacturing facilities strive for efficiency and function but aren't always recognized for their aesthetics.

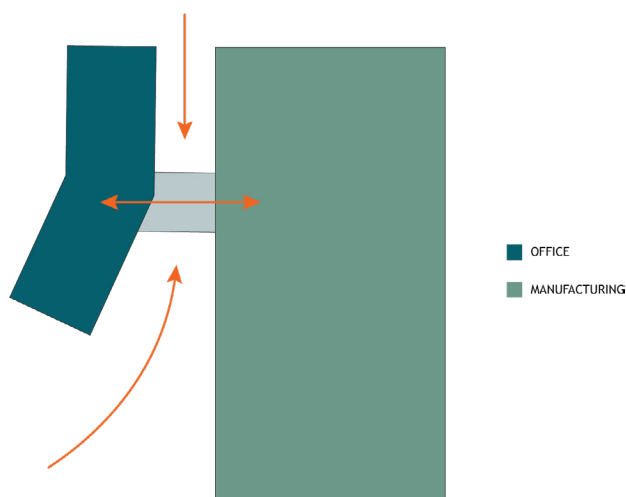
Having designed over 30 million square feet of manufacturing and industrial space, STG Design knows that, at their core, the goal of these facilities is to streamline production in an environment that stresses safety, optimizes the materials handling process, emphasizes workflow while eliminating downtime, and enhances profit through operations. **So, how can these spaces prioritize function and still feature high design that benefits occupants and end users?**

## Advocating for High Design

STG Design understood the need for peak operational efficiency in a recently completed design for an office and manufacturing facility in North Austin. The team integrated purposeful and intentional design strategies that elevated the exterior aesthetics of the three-building complex and improved the interior environment without compromising budget.

The facility comprises approximately 400,000 SF and includes a 4-story office tower and a 200,000 SF single story manufacturing space with a central entry/ amenity hub connecting the two wings. Despite the divergent functions of the three structures, the client's goal was to unify the campus and provide a sense of connectivity and equity throughout the complex.

As with each project STG Design undertakes, the team is fully cognizant that no client merits a generic, institutional solution. For this project, it was necessary to bring the same energy and enthusiasm to the entire facility, regardless of the distinct requirements for each component. With a limited budget, it was critical to identify key areas to feature high design early in the process. This allowed the team to stretch every design dollar without sacrificing the attention that each space deserved. The design team intentionally focused on advocating for enhanced design in areas that impacted the most people: the exterior façade, the main entry into the building, and the shared amenity spaces. The first two offer an opportunity to establish a first impression and support the client's goal of unification, while the shared amenity spaces – such as the full-service kitchen and café – create an inviting destination that is welcoming to all employees.







## Exterior Facade

For budgetary reasons, the traditional “form follows function” was an obvious approach for the tilt-up construction system used for the campus. Tilt-up walls typically save money due to quicker construction and require fewer skilled workers onsite than traditional masonry-wall construction. The exterior tilt-up panels, used on all three structures, were designed with distinctively different concrete finishes to break up the large elevations of exterior façade.

The design team strategically alternated panels with smooth, sandblasted, and textured finishes at key locations to provide visual interest. A budget-friendly approach of placing the panels around the campus to prioritize corner entrance locations and main amenity areas, led to a cohesive, high-design

appearance campus-wide. The panels, which were originally designed to be thicker and contain angles, were redesigned in a critical cost-saving measure to be thinner but without losing design appeal and integrity. This modification maintained the design intent while providing a substantial budget savings.

The project team, comprised of core-and-shell and interior designers, worked together to balance design with a critical need for security while emphasizing natural light. High-security areas were given a more subdued, budget-friendly façade. Introduction of light was accomplished with key sections of curtainwall glazing at prominent entry points and other areas that provide the user with views to the campus. “The design team realized that to have a successful design solution, form and function needed to be thought of as one,” said Cassie Pettinati, Office Project Interior Designer.

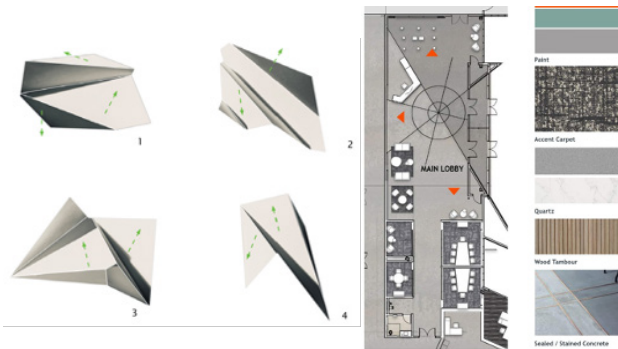
Manufacturing - Panel Type Breakdown



## Big First Impression

The main entrance and lobby serve as the central hub for the campus, seamlessly joining the office building with the manufacturing building and connecting the front and rear courtyards. The design of this entrance and lobby was an opportunity for the design team to tell the company's story and vision while pushing the boundaries of design. The spatial relationship of the building funnels the visitor to the front entrance, making it a pivotal point to reinforce employee pride and establish the visitor's first impression.

The front canopy features folded planes of MCM panels, a modern interpretation of a paper airplane, which reference the client's expertise with aerospace and aviation. In its role as a bridge between office and manufacturing buildings, the lobby features' sloped ceiling planes which draw in natural light and help bring the large volume down to human scale. On the opposite side of the main circulation corridor, the café dining area is purposefully situated in front of floor-to-ceiling glazing with expansive views to the southern courtyard.



While the primary entry hub is the focal point, funds were also allocated to create a canopy at the secondary entrance, which uses less expensive treatments to mirror the visual appeal of the main entrance. The south entry was given equal treatment as the design team, working with the structural engineer, developed a high-impact, cost-effective look using exposed structural steel.

The south courtyard features open spaces, fixed-bench stone seating, and chairs and tables that create impromptu gathering spots designed with social distancing accommodation and ability to facilitate small or large groups. Highly functional and flexible external gathering pods are equipped with wi-fi and electricity. The courtyard is accessible to all campus employees throughout the day and extends the design-story outside by promoting interactivity and creating a memorable experience for employees.



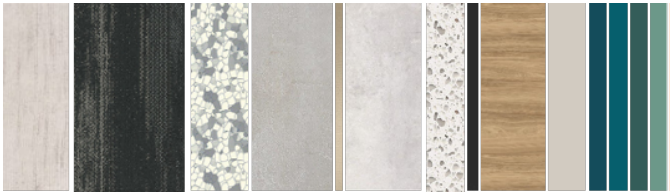
The exterior landscape creates an authentic Austin experience while being budget friendly. Through the use of low-maintenance and indigenous native greenery and lawns, we are able to soften the exterior while providing a more economical solution than sod. Mounded areas of manicured grasses are dotted throughout the complex providing an organic feel, mimicking a rolling Hill Country look. Outside paving in the front is formal and uniform, transitioning to more rustic cobblestones prominent in the south courtyard and in the employee gathering areas.

## Manufacturing Facility

While priority was given to the elements above, the design team still wanted to make the manufacturing



facility, with its chiefly utilitarian purpose, comfortable and aesthetically pleasing to the workers who spend many hours per day there. The building features high-volume spaces and large open areas in a secure environment. Manufacturing facilities typically require a large amount of concrete and durable surfaces to facilitate chemical processes and use, thereby limiting design opportunities. The design team incorporated finishes and colors to balance the neutral, durable finishes introducing deep wood tones in ceilings and feature wall elements, as well as repeating bright pops of color as a wayfinding strategy, throughout the facility to brighten spaces and add warmth.



The breakroom, a pivotal respite area for plant workers, was located strategically on a window wall featuring floor-to-ceiling windows that allow light to flood in. It is here that the design team further incorporated ceiling treatments, tactile finishes, calming colors, and soft furnishings to create a relaxing environment, mimicking those in the office building. "By being prudent with the funds provided, the team was able to achieve a high-end and human-friendly aesthetic in a functional, efficient, and budget-friendly industrial setting," said Andrea Ingersoll, Manufacturing Facility Project Designer.

## A Cohesive Whole

STG's purposeful design of the campus unified distinctly diverse operations, established a uniform identity, and facilitated a more cohesive corporate culture for the organization. The design team delivered economically feasible, yet attractive and efficient designs for the overall campus; featuring high-impact solutions that enhance the space. "At STG, we work to create transformative experiences with and for our clients. Our passion for understanding people ensures that all of our clients, not just those with endless budgets, benefit from great design that fits their needs, not ours," says Eric Lahm, Project Manager.

Founded in 1976, **STG Design** serves clients nationally and internationally with primary offices in Austin and Nashville. Constantly working to make ourselves, our clients, and our world better through design, STG Design serves clients in multi-family, commercial, research and development, healthcare, higher education, non-profit, and hospitality sectors. STG Design's legacy includes work for Trammell Crow, Karlin, Oracle, Apple, Dell, Box, Indeed, NI (formerly National Instruments), RetailMeNot, LCRA, Pulte, Del Webb, 3M, American Campus Communities, and University of Texas.

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