

Project Name: Partners Group US Headquarters

Category: 13 – Best Building Project – GC (\$70 Million)

Contractor: Swinerton

Partners Group Holding AG, a Switzerland-based private market investment management firm, selected a 22-acre hilltop site in Broomfield's Interlocken Business Park for its Project Chalet, a new multi-building U.S. headquarters campus. The firm's leadership envisioned a transparent, hard-working factory theme for its Colorado location. Driven by its values of partnership, entrepreneurship, leadership, excellence, and passion, Partners Group manifests its collaborative culture through the use of authentic and transparent materials. Design inspiration came from 19th-century factories in Switzerland and adaptive re-use warehouse buildings in Denver.

Developed by Prime West, designed by Open Studio Architecture (OSA) and built by Swinerton, the campus consists of office, amenity, and training buildings. Overlooking Boulder's Flatirons to the west and Denver to the east, the architecture incorporates full-size tumbled brick for the exteriors and interiors, arched steel windows, and an impressive exposed structural steel core, supported by concrete slab on grade and foundation walls. Each building has its own function, but consistency is found through the use of traditional building materials such as brick, steel, wood, and glass. The office building is a single-story, spanning approximately 120-feet wide and 45-feet tall, and offers a mezzanine level with elevated meeting and conference rooms. The amenities building provides space for employees to balance their work hard-play hard mentality, and dining and social opportunities. The training building includes auditorium-style seating to accommodate large meetings. Office and conference room spaces provide traditional and non-traditional seating accessible for all, which fosters the firm's collaborative culture. Partners Group sourced furnishings from local manufacturers known for their high quality.

As the project sets into the side of a hill with a 100-foot elevation change across the site, the campus includes a free-spanning 80-foot-long truss bridge built to Colorado Department of Transportation standards and boasts a 45-ton capacity. The bridge provides campus circulation over an existing ravine while adding uniqueness to the setting.

Planning the client's factory-themed vision

Tours in Switzerland and historic downtown Denver helped Partners Group and OSA refine the factory vision and enabled team members to express ideas into drawings, details, and material choices. It was essential to Partners Group that the contractor hired to build the project embraced their vision and offered a robust quality control program that they could trust to address the project's unique design aspects and their quality expectations.

For instance, Swinerton worked closely with the design firm and subcontractors to discover design and functionality solutions of the wood plank flooring installed on raised access subfloors to conceal the HVAC, plumbing, electrical, and low voltage systems in the underfloor air plenum. This design choice contributes to the factory theme by eliminating HVAC and lighting systems hanging from the ceiling over the office building's first floor.

One specific challenge with the raised access flooring is maintaining access to the systems below since wood flooring is installed above the raised access floor system. The result is sections of tongue-and-groove wood flooring that is removable at the locations that require access below. The standard wood plank is eight feet long, but at locations over the access points, the wood floor planks are glued together at different lengths to make a removable panel that is mechanically fastened to the raised access floor below. The surrounding non-removable wood planks have the tongues removed so the removable wood panes butt up to the adjacent non-removable wood planks for a seamless transition. The access points are completely unnoticeable to the untrained eye and occur at more than 500 locations!

Mockups to confirm vision

All decisions started with the client's vision and budget, first and foremost, fostered by the development partner's leadership, and the drive by the design team and contractor to overcome every challenge together.

The primary challenge centered on using modern building efficiencies to provide the best functionality for today's office while maintaining an authentic quality factory theme. Specific challenges solved through teamwork focused on meeting design vision and delivery of modern systems while achieving acoustic properties in voluminous spaces.

The industry-standard practice of mockups became critical to maintaining design integrity. Mockups typically serve as constructability review tools among the architect, contractor, and subcontractors. In this case, mockups became the avenue for building trust among the greater team to collectively meet the client's design vision by providing a true sense of what the buildings would become.

After several iterations of brick mockups, the team settled on a locally sourced "Larimer" brick mix and white mortar that is commonly found in historic downtown Denver. The mortar brick pointing consists of a weathered horizontal joint and vertical grapevine joint. This arrangement results in a pleasing, irregular line running through the bed and head joints and, functionally, helps to shed water away from the facade.

The project contains 700,000 full-size tumbled bricks to create both exterior and interior walls. An inherent design benefit is that various mason crews installed different parts of each building's brick walls. Due to the crew differences, the result is organic; what one would expect to find in a century-old factory. The window trim and metal panels are atypical details also, requiring testing through the mockups as well.

Materials for authenticity

The innovative aspect of this project is not the use of new technologies or products. This project's innovation stems from a vision of using fundamental building materials - brick, stone, timber, glass, and steel, all coming together to create a highly customized result. It's what was done – or more explicitly left undone – to these materials that create innovation and advancement.

For example, more than 13,000 pieces of raw steel and 51,400 bolts come together to establish the buildings' structure. The raw steel embraces its natural blemishes and beauty, allowing a patina to occur over time. A lack of processing contributes to innovative design intent.

While underfloor air delivery is not a new advancement, its use contributes significantly to the factory theme of openness and authenticity. Most underfloor air delivery plenums are covered by tile or carpet tiles, but the floors of the Partners Group campus are covered in hardwood planks, much like those found on a factory floor.

Original factories did not face the technology and power needs that today's modern office environments require. A raised access floor allows for an underfloor air delivery plenum that houses the HVAC, electrical and low voltage supply, eliminating unsightly power poles and ceiling ductwork, thus maintaining factory-theme authenticity. Perforated metal decking and insulation with acoustical properties help deaden sound transmission in the voluminous spaces.

Gusty winds and muddy conditions

As the site presented a 100-foot elevation change, the slope conditions created a challenging environment to provide an adequate amount of laydown areas and travel paths for 250 workers, their equipment, and building materials at peak production. During the wet winter and spring months (nearly half of the 19-month schedule), soil conditions worsened. With moisture, the expansive clay soils became slick, making it more difficult for workers and equipment to maneuver safely around the site. The site conditions influenced the majority of our safety incidents, which were slips and trips caused by the challenging gradient in slick, muddy circumstances, producing a 0.23 lost time incident rate in nearly 872,000 manhours.

Additionally, this area of greater Denver is known as a high-wind location due to downslope winds blowing in from Boulder to the west. The buildings themselves are engineered to sustain winds greater than 140 miles per hour. During construction, wind and lightning impacted at least 50 days; some days, wind gusts reached 100 mph. The team monitored the weather with

equipment placed on the top of the crane, and when there were warnings of winds gusts of at least 30 mph, Swinerton temporarily stopped work until the storm safely passed. Specific safety training focused on heightening awareness associated with aspects impacted by high winds: 40-foot tall concrete form panels, metal panel, standing seam metal roof, lateral steel installation, proper material storage, and adding more taglines and workforce as cautionary steps.

Meeting client's vision

The project has garnered industry recognition, most notably as Office Development of the Year by Colorado's NAIOP Awards of Achievement competition.

“Swinerton performed as a dedicated, highly trusted partner, from start to finish, to achieve the vision and quality set forth by Partners Group and Open Studio Architecture. You have built one of the most striking projects in recent history, and it has been a rewarding and enjoyable experience to work with you.” James Neenan, President and CEO, Prime West Development









