

Category: Best Building Project – Specialty Contractor (\$2 - \$6 Million)

Contractor: Douglass Colony Group

Project Name: 1401 Lawrence

As people continue to flock to the city of Denver and construction continues to boom, the beloved, iconic skyline is consistently evolving. Skyscrapers climb towards the sky, each leaving its own unique, new fingerprint on the city's profile. One such example, rising as a natural extension of the downtown composition without compromise to the architect's vision for the sake of conformity, is the new office building at 1401 Lawrence. Douglass Colony takes pride in its broad-scope contribution to this building that included custom designed and built perforated garage panels; roofing, waterproofing, deep rib Morin panels on levels 23 and 24; flush-seam panels in the mechanical rooms/wells; flush seam soffits around the balcony; small standing seam roofing over the garage mechanical unit; ACM panels at various locations; and the installation of a zinc panel "art wall."

From the very beginning of Douglass Colony's involvement on 1401, the challenges were clear with extreme circumstances unique to the project's nature. Downtown Denver is crowded, leaving very little space to arrange a comfortable and conducive construction zone. In the case of 1401, a 24-story building erected within a space spanning a quarter of a downtown city block, no lay-down area existed, nor did room for more than one truck, and there was an incredibly small window of crane space and use. This called for an innovative, cooperative, and flexible approach to scheduling, productivity, and methodology.

Scheduling

Substantial coordination with the general contractor and other trades on site was paramount to ensure the project was completed as successfully and efficiently as possible all the while maintaining a safe jobsite.

With such a prohibitive lack of amount of space in the ever-crowded and bustling downtown, stocking the project proved to be excessively troublesome and convoluted. Only one truck was allowed access to the site at a time, and when the need arose for heavy lifting equipment, two

semis (one for a crane, and one for a forklift) had to be maneuvered and systematized to secure that all supplies and materials made it to their needed space in timely fashion. This limited Douglass Colony to not even one full day of crane-time for the roofing materials, demanding a considerable level of organizational finesse.

Once the project was stocked, new challenges arose. Material and equipment belonging to all trades was stored on the roof throughout the project thus requiring Douglass Colony to work and schedule around others in order to install the Firestone roofing system and the deep rib Morin panels on the 23rd and 24th levels.

Before the ACM could be installed, it had to be mapped out and organized according to when other contractors and trades (i.e. glazer) would be working and finishing within areas. Similarly, the garage screen panels required a tremendous foresight when scheduling their installation. In order to be as efficient as possible with space and time, the panels were broken up into five groups and delivered and placed accordingly. Also, in order to leave space for the skip jack to remain outside of the building to throughout the majority of the project, the corners were scheduled for installation as the last area in the sequence. That way, panels would all readily slide together, and the tubes would assemble correctly (one inside of the other).

Quality in Products and in Execution

Anyone passing by 1401 Lawrence surely takes note of the perforated screen panels surrounding the nine levels of parking garage with an illuminated “art wall” at their center. Though these fascinating and eye-catching panels appear to be randomly placed around the building with varying sizes and spacing, they are, in fact, meticulously designed, planned, and engineered. Originally designed by the architects, the plans for these panels then had to be engineered to meet the specific needs of the garage with an exact ratio of wall space to air space in order to provide sufficient ventilation and air flow throughout the garage.

After ample coordination with the engineer surrounding issues between design and fabrication needs, the panels were ordered pre-perforated and cut, bent in Douglass Colony’s shop, stamped with a number for tracking, and sent off for paint before arriving in the field. As they arrived, each panel was handled and inspected by Douglass Colony’s foreman to assure product and paint

quality. The superintendent, frequently on-site, served as the “champion of quality,” inspecting the installation and regulating that other trades did not lean things on or damage any panels. Upon completion, these 100% custom metal garage screens matched drawings exactly, executing the architect’s vision and engineer’s requirements to perfection.

Innovation from the Ground Up

Construction often requires adaptability and an attitude prepared for the unexpected. At any given time, an obstacle arises calling for a change of plans. Therefore innovation coupled with adaptability is a major key to any successful project. Throughout the duration of the work at 1401 Lawrence, multiple complications interrupted Douglass Colony’s productivity requiring innovative solutions to continue work and deliver the level of excellence our company prides itself on.

In order to access the wall panels and install them, swing stages were clamped to parapet walls enabling workers to come out between panels and hang the metal below. This freed up space on the ground to store materials in an already tight work environment by eliminating the need for a boom or other type of lift.

As the garage is sloped to circle down to the ground level, the metal tubes did not always align with the concrete where the attachment points were meant to be. Engineers creatively solved this issue by coming up with a specially made steel structure attaching to the areas where this occurred. Other specialty connections had to be designed to accommodate the “art wall” (perforated panels that are backlit to create an image similar to a Lite-Brite). The correct steel was not always in place, so a connection was engineered from wall to soffit, and though the elements for the “art wall” were prefabricated based off of guaranteed dimensions, they were not always an exact match, so the tubing was made to be adjustable in all directions allowing for tolerances.

Through innovation, flexibility, and persistence, Douglass Colony was able to safely, proficiently, and expeditiously complete its scope despite the many snags and interruptions.

From the perforated metal screens around the parking garage, to the waterproofing on the paver decks, to the deep rib and flush-seam panels and roofing on the top levels, Douglass Colony takes great pride in its work on 1401 Lawrence and was honored to be selected to help make this uniquely striking building one that Downtown Denver is proud to add to its iconic skyline.











