

# AGC Colorado ACE Award

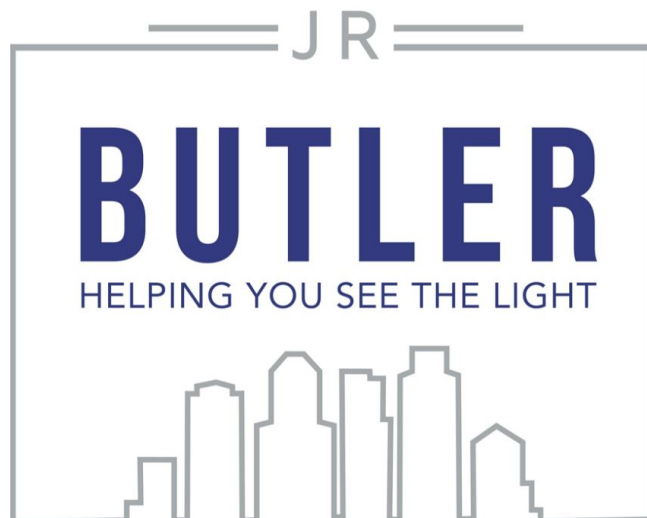


J.R. Butler  
Presents

1401 Lawrence

For the  
Best Building Project - Specialty Contractor  
(Over \$10 million)  
2017 Award

Project Team:  
Project Manager: Brian Sweet  
Superintendent: Derek Geringer



## Smarter, Safer, Faster

1401 Lawrence is a brand new 22 story office building and parking garage in downtown Denver. Designed to offer premium commercial space in the heart of the city, this prominent high-rise modernizes the Denver skyline. Built in the LoDo historic district, the goal of the design was to incorporate the local and authentic atmosphere while integrating contemporary style. The project consists of an elegant lobby, various retail shops, pedestrian access to the 16<sup>th</sup> street mall, eight levels of parking, and 13 stories of leasable class AA office space. The Architect and General Contractor, The Beck Group, chose JR Butler as their glass and glazing partner for this notable project. The scope of JR Butler's responsibilities consisted of over 150,000 square feet of curtain wall and a glazing contract value in excess of \$10 million.

JR Butler was ultimately awarded the contract due to their innovative, high quality design and construction solutions. During the bidding process it was clear that Beck required more than a glazer who can install curtain wall on schedule. Their vision called for a partner to come alongside and engineer a unique design to meet the architectural aspirations for the building. This process is commonplace at JR Butler and they take the initiative to offer exceptional solutions to satisfy all parties. The benefit of this commitment is realized in the design Charrette meetings which are organized and conducted by their design team. This process is implemented to identify and execute solutions to overcome technical challenges, reconcile misconceptions, and enhance communications within the design team. This process is a highlight to JR Butler's preconstruction services and a signature of their organization. This project in particular utilized eight charrette meetings, using an iterative process to engineer various design solutions and installation methods. JR Butler worked closely with Beck Architecture and Beck Construction as the shop drawings were produced and finalized. This allowed for the preliminary curtain wall design to be converted into construction shop drawings in an accurate and efficient manner.

During the course of the design Charrette meetings, JR Butler faced many unique design challenges. The primary challenge was the design and implementation of the unique corner wing wall condition. The intent of the wing wall panels was to create the illusion that the curtain wall is suspended at the edge of the structure. While visually appealing, this design presented many

thermal, structural, and installation obstacles. To solve the thermal challenge, JR Butler separated the wing wall from the main curtain wall to inhibit thermal transfer into the building. By separating the wing wall from the main curtain wall, JR Butler then had to redesign a new attachment detail that allowed for industry standard installation tolerances while also minimizing the visual impacts of an anchor exposed on the exterior of the building. In addition to a complex design for the wing condition, the field installation took extensive planning and coordination. Up until this time, Denver had not seen this unique condition; therefore, a new installation method had to be developed and implemented without flaw.

Additionally, the building parapet condition introduced a new challenge for the JR Butler design team to overcome. Typically, the curtain wall system stops short of the roof; however, in this case, the design team's vision was to mimic the effect of the wing wall by extending the curtain wall past the roof. The challenge with this variation was that it became extremely difficult with a conventional installation. Via the design charrette process and subsequent physical testing, JR Butler, Beck, and their waterproofing consultant developed a roofing detail that allowed the roofing to tie directly into the head of the curtain wall. The resulting detail is both robust and water tight.

The complex project details not only required JR Butler to re-think its standard design and construction methods, but also inspired them to revamp their entire safety program. At the onset of the project, JR Butler made the decision to migrate from a standard safety director, who oversees their installation crews on all projects, to a team of embedded safety personnel who are also a part of the installation crew. The goal of these safety embeds is to evaluate the safety needs of each of their projects on an individual basis and fine tune those safety requirements to meet the project specific needs. Additionally, the safety embeds cooperate with other project leaders to share ideas and promote overall safety throughout the organization. JR Butler's ultimate safety goal is to encourage a culture of safety that seeks to improve by rewarding rather than penalizing the identification and implementation of safety issues and improvements.

Constructing 1401 Lawrence with the upmost quality and safety standards was fundamental to JR Butler's entire team. As a result, The Beck Group and JR Butler not only

completed an amazing building but also built the foundation of a great partnership through their mutual respect and eventual success on the project. Every department within JR Butler was focused and committed to providing the best product and solutions to the customer, First Gulf. JR Butler's preconstruction and design team in partnership with the Beck Group, developed innovative design solutions that aligned perfectly with the projects critical objectives. JR Butler's manufacturing team successfully built over 2,200 unitized panels while holding to the highest testing and quality standards. Their logistics and operations team delivered each panel to an already congested downtown site with little to no disruption to other trades on ongoing activities. Finally, their field operations team managed the scheduling, sequencing, coordination and installation process with precision, excellence, safely and on time. The end result is a beautiful building that pierces the Denver skyline. A LEED Gold certified building, 1401 Lawrence is a work of art that deserves recognition for its many unique features. JR Butler was chosen because of their company culture, their innovative methods, and their ability to provide an outstanding product while meeting the challenge to build it Better, Faster, and more affordably without compromising safety. They delivered on that commitment and the result is a spectacular building that is a testament to all who see it.