

CAPITOL BUILDING STRIPPED, RESTORED WITH SUBTLE NODS TO DENVER PAST!

CATEGORY: BEST BUILDING PROJECT UNDER \$2 MILLION - SUBCONTRACTOR

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IF THE WALLS COULD SPEAK

If the walls of Colorado's state capitol dome could speak, they would tell some interesting stories. In the case of the century-old 200 East Colfax Avenue building, the walls have been given a voice. Douglass Colony has spent three years restoring the old building while interpreting its history snippets. The building is intentionally reminiscent of the United States Capitol. Designed by Elijah E. Myers, it was constructed in the 1890s from Colorado white granite, and opened for use in November 1894. The offices houses in the Colorado General Assembly and the offices of the Governor of Colorado and Lieutenant Governor of Colorado. More than a century of water infiltration coupled with Colorado's freeze/thaw cycle caused extreme rusting and deterioration of the metal on the exterior of the cast iron tower and dome. Not easily visible from the ground, this corrosion includes the metal fasteners holding the architectural details in place. Hundreds of pieces of the assembly have been affected by the weather over the dome's history. The original gold first used to gild the copper-clad dome was donated by Colorado miners. The capitol's original signature dome was made of copper, but was swapped out for gold in 1908 due to the copper's tendency to oxidize, creating a dull patina cover. The dome was plated with 200 ounces of glistening 24-karat gold leaf to commemorate the Colorado's Gold Rush and the brave pioneers and miners who helped build Colorado. Three reapplications of the Colorado gold leaf occurred between 1908 and 1980.

THE PROJECT OF A LIFETIME!

The project's goal was to repair and restore damage to the exterior painted circular tower above the roof of the capitol, and re-gild the famous gold dome atop the century-old historic landmark. The architectural structure and exterior detail was originally manufactured out of cast iron – not out of stone as many believe.

The subtle reminders of the past, highlighted throughout the building as part of a recently completed conservation and interpretation project, were renovated carefully to keep the effect intact. "If we have done our jobs well," State Architect Larry Friedberg said of the restoration, "you won't be able to tell we were there, except the building will be in much better shape than it was before we started. "The exterior has been stripped back to its original 1908 foundations and restored. We've done it with the government employees in mind, avoiding interference with what they do. Where possible, things had been left in their original state to keep changes to a minimum. Items that nod to the building's past have been restored and left in place. In most cases, the renovation has been a repair, rather than replace, job.

THE CONSTRUCTION PROCESS.

Everything in the capitol today that is gold leaf, are copper panels with gold leaf underneath. A large part of what is seen as gray that is ornamentation or is window flashing or detail work is also copper that is

painted gray and mostly the upper portions. The lower portions below the dome area are cast steel. Douglass Colony Group removed all of the existing copper that was painted in gold leaf.

The copper was recycled. Copper Douglass Colony used was recycled as well. The gold was not valuable enough to recycle. Everything was custom fabricated; copper roof panels 16 ¼ some 16 ounce flash and almost everything else was 20 ounce copper. All the ornament pieces that were there were removed, labeled and tagged for the location they were in because this is a historic building. Thus, they had to be restored, refabricated to historical standards, and installed in the same place on the building. All the detail work was redone and brought up to new standards or replaced and put on the same place on the building.

The building originally had air vents throughout the dome with the intention to release warmer air. These vents were later thought to have little use and capped. Douglass Colony replaced the caps with exact replicas. When folding the pieces together, the pieces together, you cannot take a piece of paper and fold it together otherwise it would collapse so fingers were cut into the metal to notch together and then welded.

SPECIAL OBSTACLES

Douglass Colony faced a multitude of obstacles throughout the renovation on the Capitol Dome project including limited access to various decks, coordination between other subcontractors, staging and extreme weather. Taking place during the harsh winter months, the Douglass Colony crews faced blizzard-like conditions, heavy snows, and strong winds including two bouts with high winds and the record-setting cold snap earlier in December.

After battling some challenging weather conditions this fall, the gilding process on the dome was completed. All staging activities were planned to inflict minimal disturbance to a heavy pedestrian traffic area.

STREAMLINED PROCESS

Performing multiple scopes and coordinating with various trades, Douglass Colony focused on coordination and personnel management to streamline the process and personnel management to streamline the process and meet deadlines. In order to keep the project schedule, Douglass Colony appointed one project manager as a single point of contact for all tasks performed and all general contractor/owner communication.

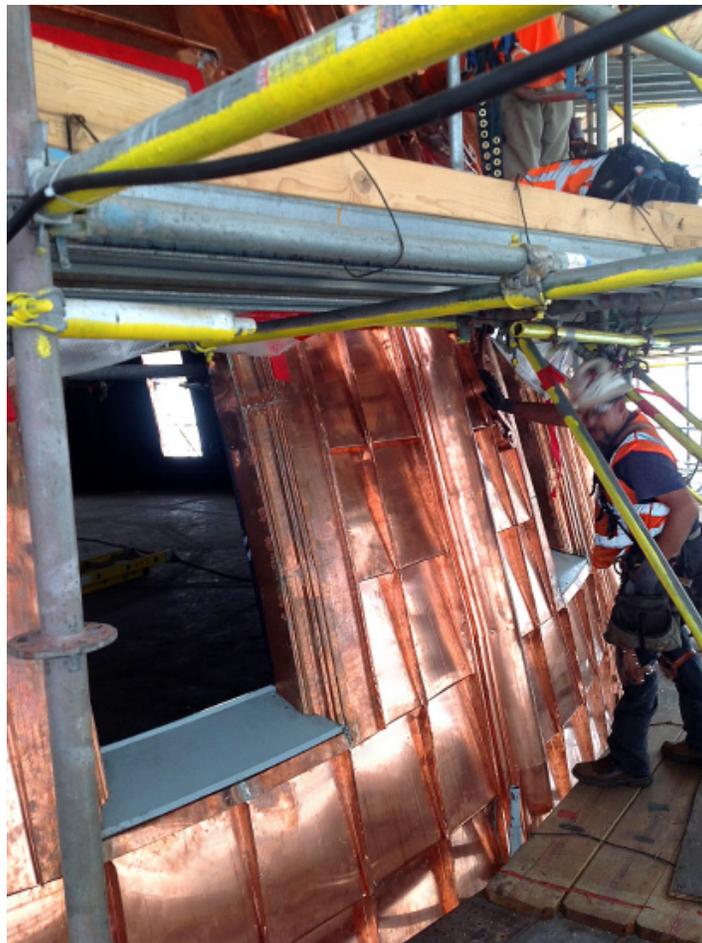
The project manager spearheaded all material manpower scheduling and coordinated all activities in adherence with surrounding trades. Additionally, two superintendents were assigned for each scope performed and three foreman were appointed under them to manage operations. Having one point of contact for outside sources and maintaining a tiered internal communication allowed us to properly coordinate operations for optimal personnel and process management.

SCHEDULING SOLUTIONS

Douglass Colony practiced innovative scheduling and reporting solutions by performing safety inspections and quality control reports via a state-of-the-art iPad software system. This helped to orchestrate timely, efficient communications between field and office staff.



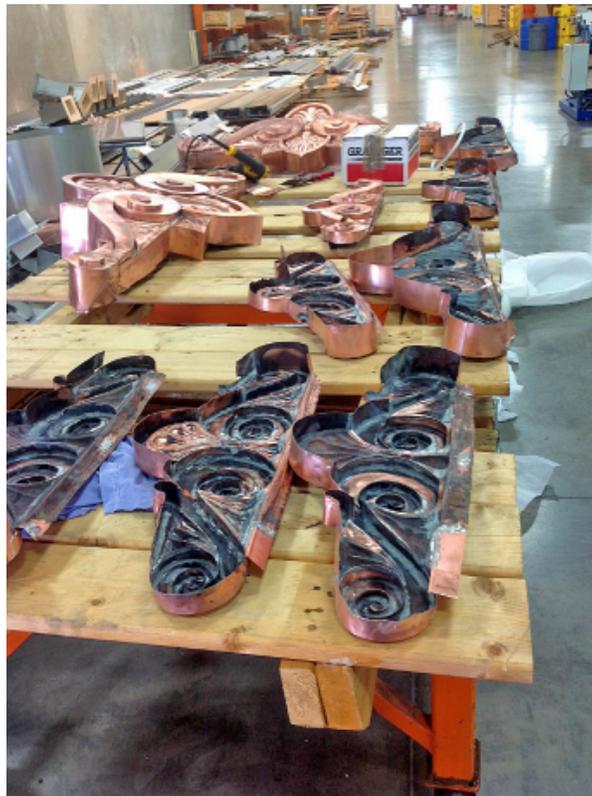
Restored copper vent covers originally allowed venting of dome



Douglass Colony Group working on copper window trim and shingles



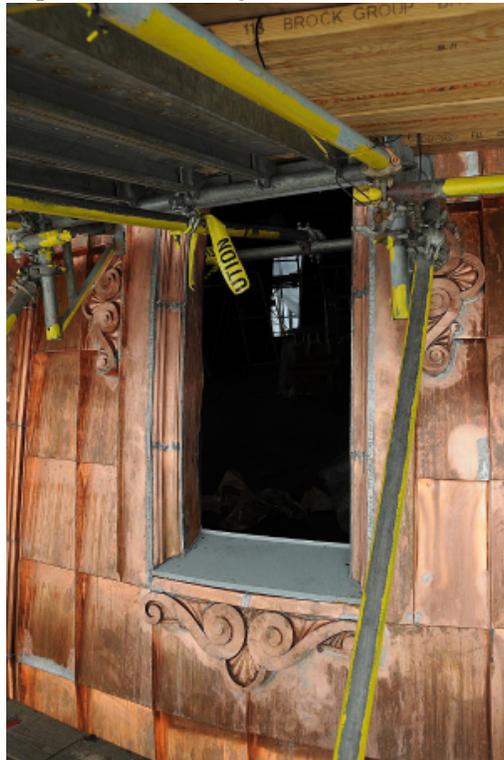
Existing piece of the lantern section of the Colorado State Capitol Dome



Ornaments removed from Capitol restored and reinforced to hold up better than original.



Ornaments totally restored and replaced on existing work. Lower ornament sun scroll with dome on top.



Copper framed window restoration with new ornamentation surrounding it.



Battleship gray paint eventually covered all copper. Yellow underlay for gold leaf adherence.



Restored copper base where the top of the capitol lantern sits.



Completed Capitol Dome