State Preservation Board
Texas Capitol Roof Replacement and Rehabilitation Update 5/5/2025

The project is entering the home stretch, 85% complete. Roof, skylight, and lighting work was completed over the legislative chambers in time for the 89th Legislative Session. Work will continue until summer at the four corner pavilions, and through the summer at the north wing, along with associated interior projects. The east and west scaffolding will be removed over the summer, leaving the north scaffolding into September. The project will require the worst-case full three years, with the project ending mid-fall, but this likelihood was anticipated.

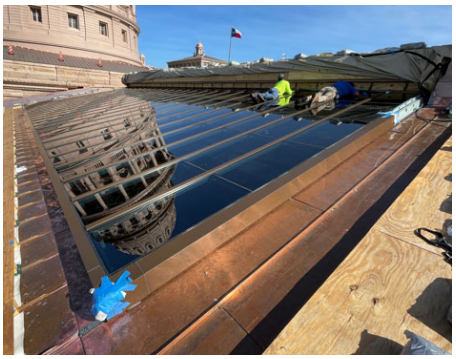
Progress

The east and west skylights are fully replaced. Viewed from above, the skylights better replicate their historic appearance. Original 1888 curbs had been roofed over in 1949, and both those curbs roofed over again in 1993, resulting in a built-up condition and a "turned" appearance which reduced their visual height. The new, cleanly detailed curb replicates the original appearance with modern systems and will keep this leak-prone area watertight.

1993 curb with 1949 cant

IMG_1117.jpg

2025 curb



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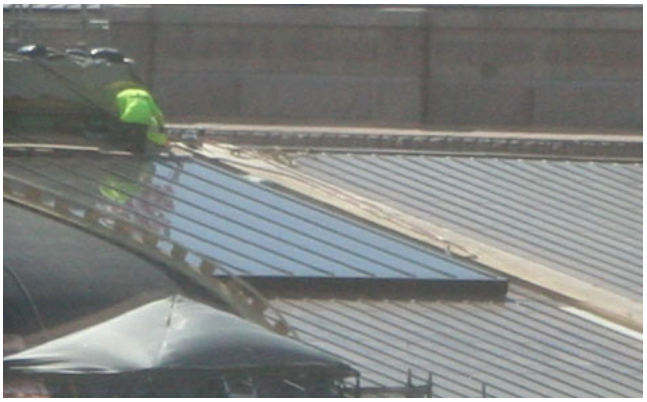
2025 skylight



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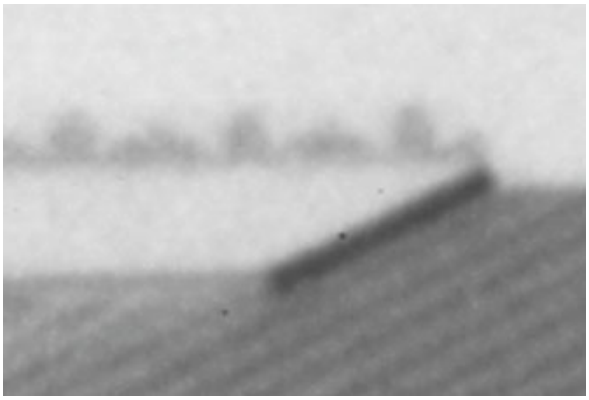
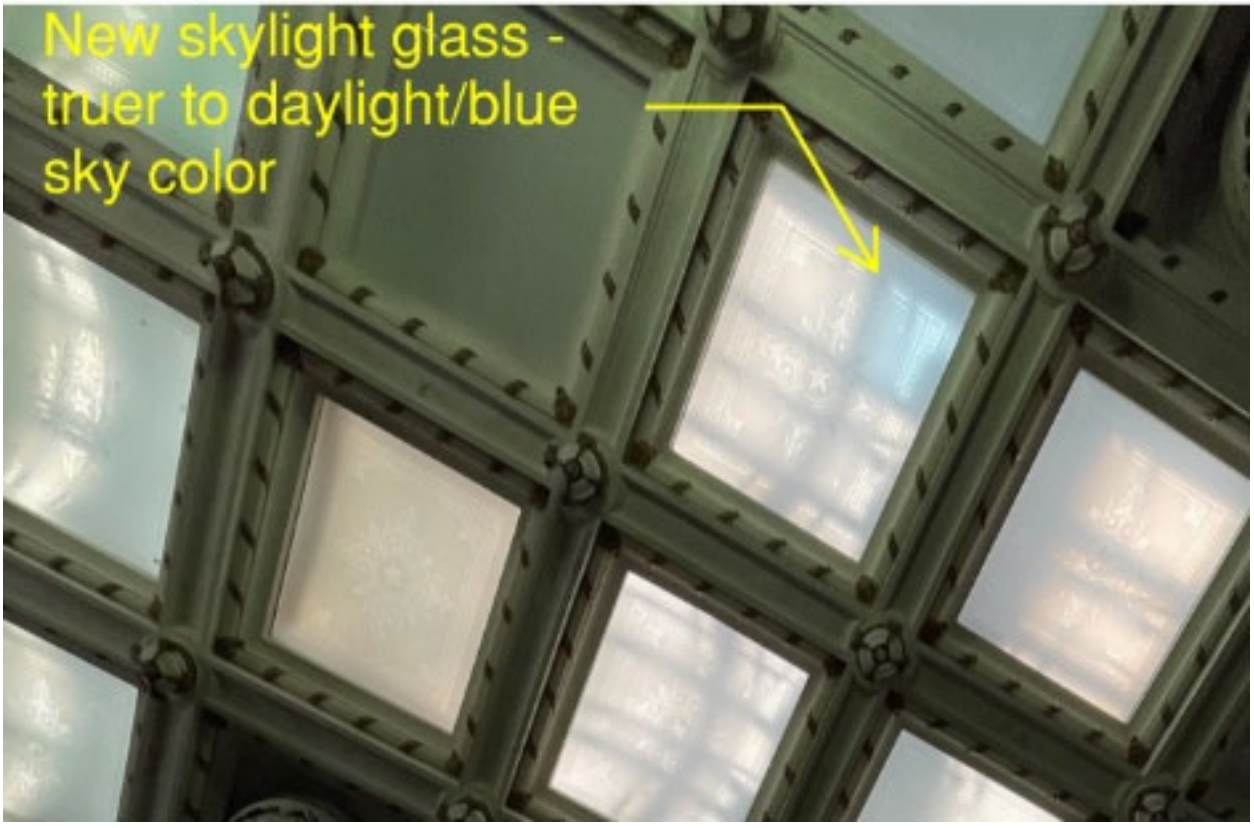
1888 skylight



AHC_C00141_Neg#A49_South_Facade_c1903-1906.tif

Reflection of the glass was limited to 12%, well below Austin's modern code standard of 30% and close to the historic 6%.

The new gray skylight glass provides more natural-color daylight entering the chambers below, while low-E coatings limit heat buildup in the attics. An integral UV-blocking layer protects furnishings, textiles, and artwork in the chambers below.



The new LED lighting system at the laylight glass chamber ceilings below the skylight replaced the circa 1995 gymnasium-style metal halide lighting, offering higher light levels, reduced maintenance and energy costs, reducing heat loads in the attic, and providing dimming and light color control to the chambers below. The transparent LED light allows through 90% of daylight and full visibility, allowing the ceiling to range from a completely original historic appearance (naturally sunlit with no artificial light except the 1890 electroliers), to fully lit to modern office standards for working conditions into the evening during late night legislative sessions.

Previous appearance on a sunny day, lights on 100%:

IMG_1017.JPG

IMG_2824.JPG

New appearance on a sunny day, lights on 100%:

1/6/2025

1/6/2025

The skylight ridge vents were improved to prevent wind-blown rain and dust from entering the attics, previously a major source of water intrusion. They were carefully detailed with screens to keep out crickets during their annual September invasion, as well as carpet beetles and their damaging impacts to the reproduction wool carpets in the chambers below. It also reduces the visual appearance of the non-original raised height of the reproduced ridge cresting detail.

1995 detail:

IMG_0571.JPG

New detail:

IMG_5569.JPG

Work continues on the four corner pavilions, being rebuilt in non-corrosive copper, restoring their historic detailing, and fully waterproofing them for the first time in their history. Waterproofed wood backing was added at all decorative trim to minimize damage in hailstorms, and provide additional points of attachment to improve wind uplift resistance. While the standing seam roof may require replacement in 100-125 years, this decorative metal was designed to remain as long-lasting as the 1888 metal dome. All decorative metal will be painted to match its historic appearance, ca. 1888-1915.

IMG_5612.JPG

IMG_0098.JPG

IMG_6064.JPG

Work proceeds at the north wing, including its lantern and skylight. Load capacities of the historic iron structure made scaffolding this area for safe work a challenge.

IMG_8220.JPG

IMG_0001.JPG

A very tall crane was required to lift the 15 foot tall, ca. 1993 reproduction ventilator off the top of the lantern, required to replace the skylight. It was tested and confirmed to leak in several areas, and will be repaired before being re-placed.

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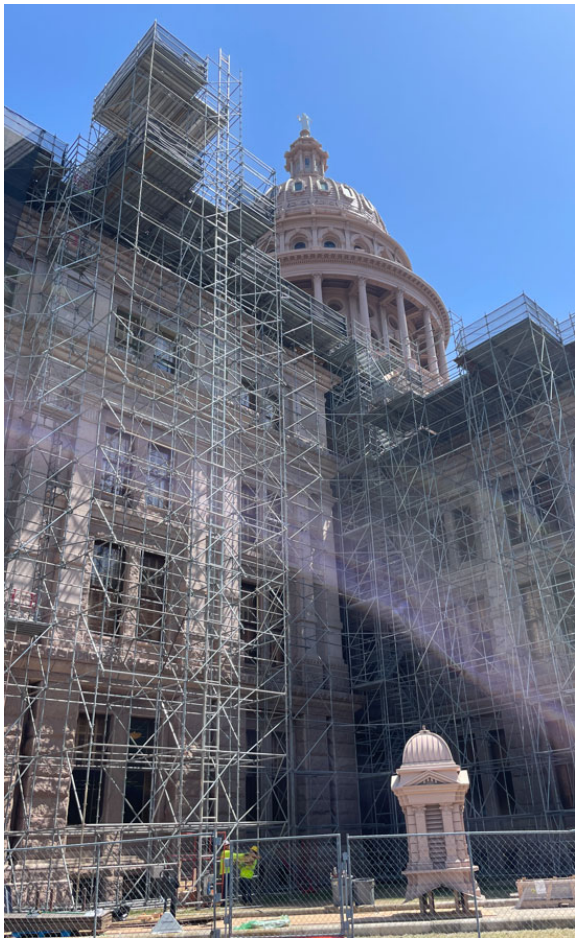

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We are replacing split, rotted, patched, and poorly attached 1888 gutter blocking to improve wind resistance at this wind-prone area.

IMG_0124.JPG

In the process, opening this space for the first time since 1888, we found what we believe is a metalsmith's hammer from the original construction, likely used to fit the wrought iron straps into place, which appears to have caught fire and was abandoned in place. It will be conserved and eventually placed on display in the Capitol Visitors Center.

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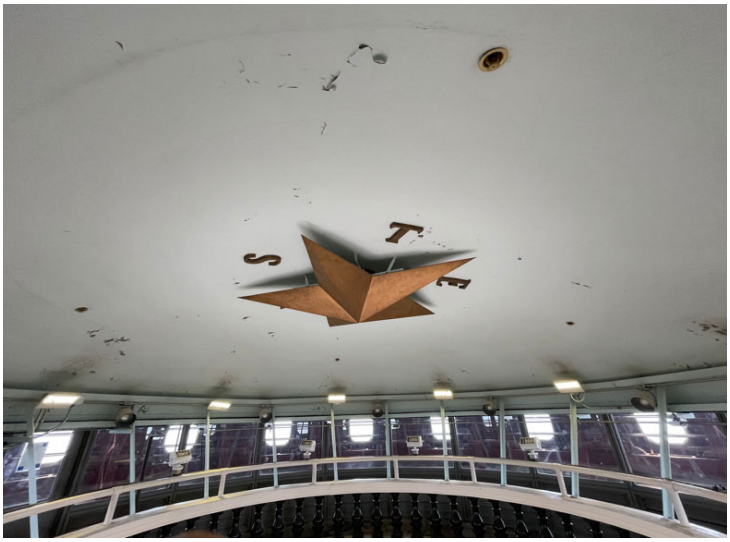
New LED dome lighting will be installed this summer, returning the dome to its fully-lit glory. Currently it is only lit from the south, and the ground. Mockups were completed to ensure even lighting, without harsh shadows, and consistent with the historic floodlight colors. Coincidentally, the LED lighting mockup was conducted close to the 100th anniversary of the dome's first floodlighting with Novalux incandescent floodlights in February, 1925.

IMG_8024.JPG

(Photo No. 119826)
Fig. 11
State Capitol Building, Austin, Texas

Scaffolding inside the building will be required this summer for repainting of the diaphragm above the oculus 218 feet above the rotunda floor, and installation of uplighting at the north atrium ceiling coffers, consistent with the light treatment in the rotunda. This will allow removal of lighting above the north atrium laylight ceiling, restoring it to its historic appearance. Scaffolding for both will be a challenge.



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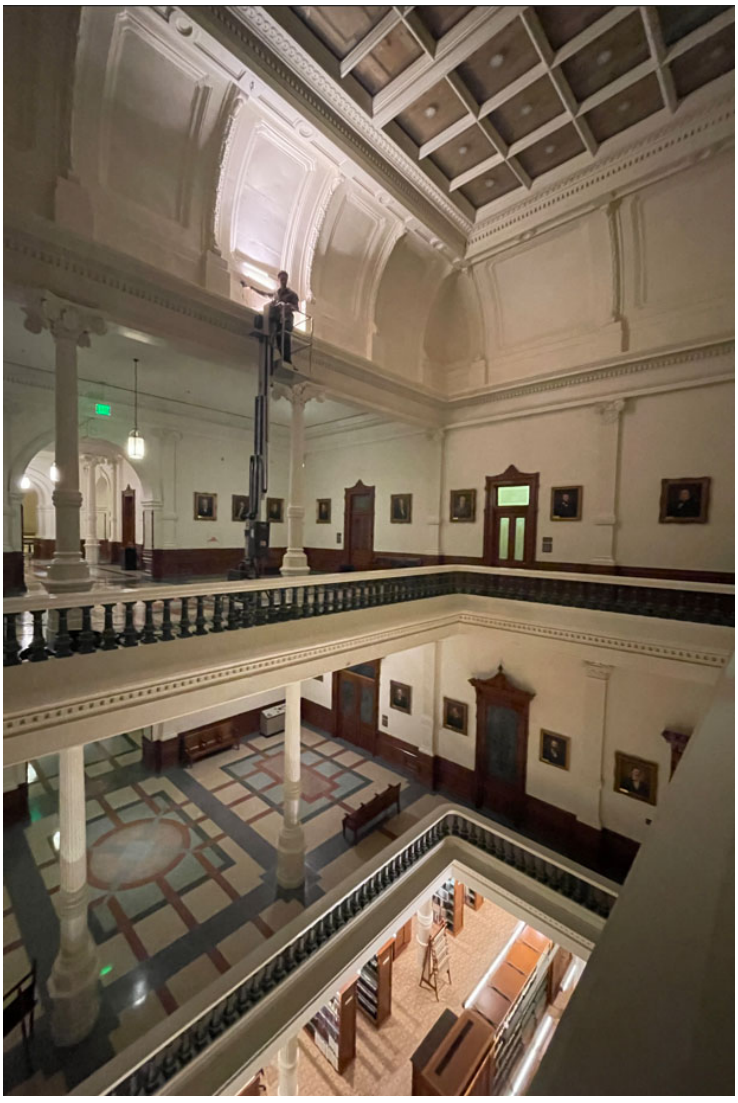

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