

Central Synagogue Atrium



Project: Facade Sealant Replacement & Water Ingress Investigation

Sector: Facility Management



Project Overview

The Central Synagogue is one of Sydney's most iconic places of worship and community gathering. Over time, its glass atrium—an architectural centrepiece—began to show visible signs of deterioration, including failed sealant joints, calcified hard water stains on the glass, and persistent water ingress issues. With previous leaks affecting areas around the atrium and roof overrun, the synagogue's leadership needed a trusted, experienced team to identify the source of the leaks and provide a lasting remedial solution—without disrupting the busy day-to-day function of the venue.

Services

Anchor Safe Rope Access was engaged to carry out a detailed inspection, followed by design and implementation of a comprehensive, holistic solution to address the water ingress issues plaguing the atrium using rope access techniques—minimising disruption to the synagogue's operations while ensuring safe and cost-effective delivery.

Our specialists commenced with a comprehensive visual inspection and water ingress test of the upper roof, targeting areas

where leaks had been reported. Once identified, we expanded testing to the remainder of the upper roof and overruns to rule out any additional hidden vulnerabilities. All findings were documented in a photographic report with detailed recommendations for remediation.

The original sealant between the glass joints and mullions was showing clear signs of deterioration, leading to both water ingress and visual discolouration. Using rope access, our team applied Tremco TREMglaze 50 to the joints, paired with Spectrem Simple Seal 1.5" Black for a clean and watertight finish. This premium system was chosen for its weather-resistant properties, long-term durability, and superior adhesion to glass and aluminium.

In addition to reestablishing the integrity of the atrium, we undertook specialised cleaning to remove calcified hard water stains from the glass panels, restoring the clarity and appearance of this important architectural feature.

To address water ingress in the roof overrun area, we supplied and installed:

- A new back tray behind the overrun

- New pressure seal flashing, replacing deteriorated components
- A new rubber dektite to the exhaust pipe
- A fresh barge capping for long-term weatherproofing

We also replaced a corroded aluminium angle around the upper roof glass perimeter, including full corrosion treatment and sealing of the box gutter to prevent further damage.

Results

After all sealing and roofing works were completed, the affected areas were water tested again, and no further leaks were reported. The synagogue now benefits from a watertight, professionally restored atrium—protected from the elements and significantly improved in appearance.

Added Value

- 10-Year Workmanship Warranty
- Manufacturer Warranties on Tremco products
- Full rubbish removal and site cleanup
- Zero disruption to synagogue activities during works

This project demonstrates our ability to deliver complex remedial, and facade works on sensitive buildings using safe, non-invasive rope access techniques. With award-winning service and trusted product partnerships like Tremco, Anchor Safe Rope Access continues to lead the way in high-rise facade maintenance and water ingress solutions.



At Tremco, we're pleased to be able to partner with professionals who not only understand the technical requirements of our products but also execute them flawlessly in complex environments. Anchor Safe Rope Access have demonstrated exactly that during their many atrium restoration projects using our Tremco Simple Seal & Overlay Systems.

Despite the challenges posed by the height, glass geometry, and previous water ingress issues, their team apply our systems with exceptional precision and care. The result is a robust and watertight seal that restores the integrity of the façade while meeting our high-performance expectations. Their use of industrial rope access and fall arrest methods to safely perform intricate cleaning and installation with minimal disruption is a testament to their technical ability and professionalism. We're confident that this installation will stand the test of time, and we look forward to supporting Anchor Safe Rope Access on future projects where quality and performance matter."

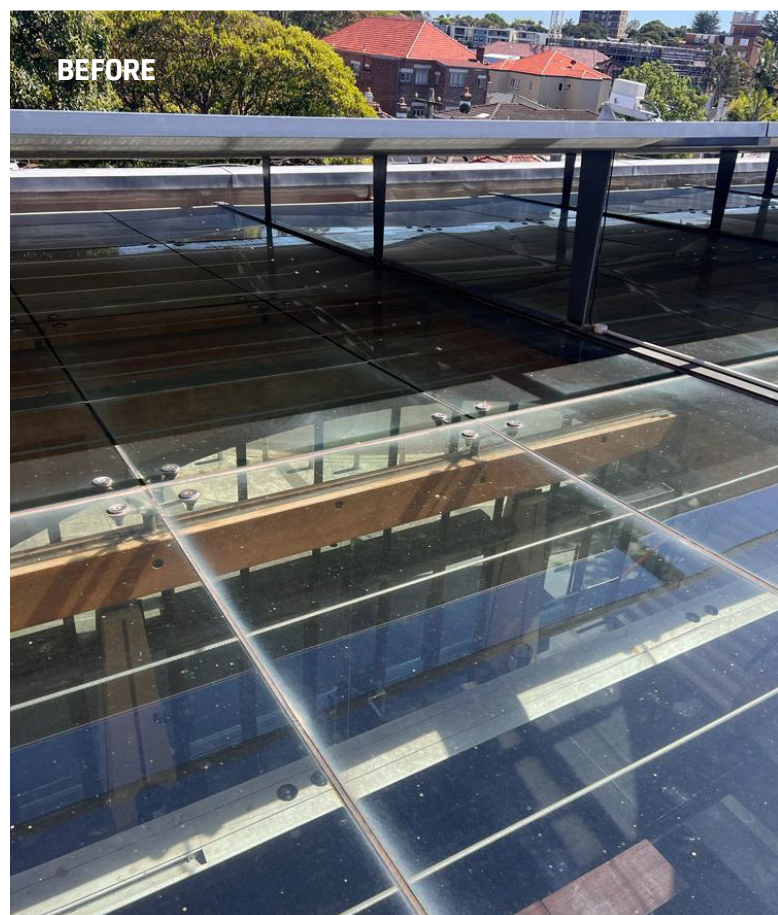
Matthew Reid, Technical Sales Representative NSW



Effective application of the Tremco TREMGlaze 50 and Spectrem Simple Seal 1.5.



New sealant between all glass joints.



Old defective sealant on the Atrium of the Central Synagogue



Our technicians in action applying the sealant



Inspection of perished barge capping to determine water ingress areas



Water ingress damage on the inside of the atrium wall panels