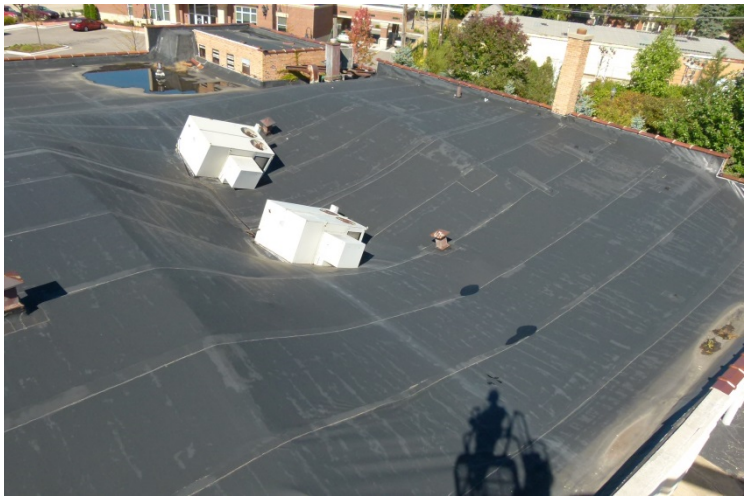
Project Profile



The Tri-State Electronics building is a single-story structure with bowstring wood roof trusses supported on load-bearing masonry walls. The building was located immediately adjacent to a primary 4-lane highway through the village.

On one October day with no precipitation or wind, 2 of the bowstring trusses failed. One of the trusses was located beneath 2 rooftop HVAC units. However, those units had been installed many years prior to the roof collapse. Collapse of the 2 failed bowstring trusses progressed slowly over a 5-hour period. Collapse of the trusses also caused significant outward movement of one of the masonry bearing walls. Village officials closed 2 of the 4 lanes of the adjacent highway due to concerns that the building could progressively collapse onto it.

Upon confirmation that roof and exterior wall movement had generally ceased, BTC evaluated the condition and stability of the exterior walls and portions of the roof that had not collapsed. Based on this evaluation, BTC prepared a temporary stabilization plan to minimize the possibility of further collapse. BTC also coordinated installation of the stabilization components for the building.

Stabilization work was completed within 2 days of the collapse and all lanes of the adjacent highway were reopened.

Project Name:
Emergency Roof and Wall Stabilization
Tri-State Electronics Building

Project Location:
Mount Prospect, Illinois

Client:
Tri-State Electronics

Approximate Construction Cost:
Not Available

Year Completed:
2013

Nature of Services:
Emergency Stabilization Consulting

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