

Southeast Financial Center Roof Demolition

Miami, FL

Project Description

In downtown Miami, the Southeastern Financial Center (SEFC) has three distinct areas within the property: a 55-story skyscraper, a 15-story annex building, and a plaza in between the two buildings. A 500-ton space frame acts as a roof canopy for the plaza and spans between the two buildings. The truss is 175 ft above the plaza and has only four inches of clearance to each building facade. The canopy was slated for removal due to its high maintenance costs and damage from a recent hurricane.

Owner

Pontegadea

Contractor

ZPMC USA

Designer

Skidmore, Owings & Merrill

Our Role

McB acted as the Demolition Engineer of Record. In this role, we detailed procedures for the safe removal of the canopy structure after a full analysis of the truss structure, building support locations, temporary works, and specialty demolition equipment.

Total Contract Value

\$20 Million

Timeline

2019-2020

Construction Method and Specifications

The 120ft x 240ft truss structure was cut into two halves while still supported by the adjacent buildings. After the support points were cut, the first half was lowered using a synchronized strand jack system. Once at ground level, the three-dimensional truss was supported by temporary shoring and cut up piece-by-piece. The second half was lowered in a similar fashion, after the first half was cleared and hauled away from the project site. The second half was supported on a temporary shoring and skidding system which slid the truss structure to the same dismantling location as the first half.

