



Hogan Hall, located near the lakefront of Northwestern University's Evanston Campus, is a 5-story concrete frame building. The building has unique geometric architectural features, in a sawblade-shaped configuration. The building's exterior consists of limestone panels supported by the concrete frame. Exterior windows are wood frame, and arranged in a vertical strip fashion. However, the windows are offset every floor resulting in various window widths at each vertical group. In 2009 and 2010, the windows were retrofitted with new custom aluminum pressure bars and caps designed by BTC.

The unique design of the building results in a total of 10 distinct roof sections across the building's footprint. These include the main low-slope roof above the 5th floor, intermediate steep-slope roofs above penthouses, standing seam lead-coated copper steep-slope roofs above former greenhouse areas, and an upper low-slope penthouse roof.

BTC evaluated and documented existing conditions of the main, intermediate penthouse, and upper penthouse roofs. BTC also reviewed available original design documents in order to prepare design documents for the replacement of the roofs and greenhouse windows, as well as HVAC improvements. BTC assisted the University in identifying qualified contractors to perform the work and obtain competitive bids, and performed construction phase services.

The roofing system on the building's main roof and penthouse roofs was replaced with a new 3-ply modified bitumen roof membrane with an aggregate surfacing. New roof accessories were provided including stainless steel sheet metal accessories, custom designed perimeter edge metal, pre-fabricated roof ladders, a roof hatch, and proprietary fall restraint anchors.

BTC also designed modifications to the existing curbs around the perimeter of the greenhouse areas and specified an architectural grade fixed aluminum window system.

Project Name:
Hogan Hall Roof Replacement

Project Location:
*O. T. Hogan Biological Sciences Building
2205 Tech Drive
Evanston, Illinois*

Client:
*Northwestern University
2020 Ridge Avenue
Evanston, Illinois 60208*

Approximate Construction Cost:
\$1,665,000

Year Completed:
2017

Nature of Services:
*Evaluation of Existing Roofing Systems,
Design of Roof Replacement, Bidding
Assistance, and Construction Phase
Services*

