

Institutional



Vanderbilt University Chemistry Building
Nashville, Tennessee

University Facilities

The Chemistry Building is a five-story plus penthouse classroom and research facility constructed in the air space over an existing lecture hall, library and classrooms. The elevation of the first framed floor is at approximately 20' above the existing grade, just above the roof structure of the lecture hall.

Carpenter Wright Engineers developed a unique framing solution, requiring five columns that extended down to the foundations on one side of the lecture hall, and only three columns and two stair/elevator shafts on the other side, extending through the occupied library space. The preferred locations for the columns to extend through the library were selected by the Library Director, and the Chemistry Building framing was adjusted to accommodate these locations. The design utilized a complex network of steel trusses and plate girders, both in simple span and cantilever conditions, to provide a framing platform just above the roof level of the lecture hall to support the regular column grid of the Chemistry Building above.



Architect: *Payette Associates*

Contractor: *Centex Rodgers Group*

CWE Design Offices:

Nashville
Knoxville