



Temple University Multipurpose

HEALTH SCIENCE CENTER

MICHAEL WIEGMANN - STRUCTURAL

Architecture

Expression of internal functions on the exterior
Responds to surrounding buildings
Dramatic curved glass façade
Oval tower containing gathering spaces
Three story atrium
Glass and brick curtain wall
Spaces: library, classrooms, labs & supporting areas,
commons with dining space
Bridge and tunnel connects new structure to existing
building



General Information

480,000 SF, 13 stories,
150 million fast track
Project Dates: Sept 2006 - May 2009
Owner: Temple University
GC & CM: Gilbane Inc
Archit., Struct., MEP: Ballinger, Inc.



Structure

Steel frame construction with multiple transfer trusses
Typical column sizes: W12 and W14
Typical beam and girder sizes: W21 and W24
2.5" slabs on 3" deep, 20 gage galvanized composite steel deck
Braced frame lateral system in both directions
40% shallow foundation footings with 1'4" to 2'8" depths and
60% caissons with 15' to 35' depths.

MEP

VAV system with ten 35-65,000 cfm AHUs
Energy heat recovery wheel for AHU
Laboratory exhaust through ten induced radial dilutor fans
Medium voltage primary selective system 13.2KV, 1200A
10,000KW 480/277 3Ø4w Emergency Diesel Generator
Multiple Motor Control Centers with 480 V, 2000 A capacity

