

URS - ARENA DISTRICT OFFICE BUILDING

Columbus, Ohio

architecture

Ohio Basic Building Code
5 floors + penthouse
size - 102,678 SF
use - mercantile + office
materials - masonry exterior
 industrial glass
roof - single ply EPDM
 polyisocyanurate
 board insulation



structural

FOUNDATION

- spread footing of various size at the columns along with grade beams

MAIN

- 5" Slab on grade
- 2" steel deck + 3-1/4" light weight concrete composite floor system
- 30'x30' typical bay
- wide-flange structural steel
- braced frames to resist lateral forces

ROOF

- 20 gage steel roof deck on steel beams (W16 typical)

project team

owner - Nationwide Realty Investors
architect - URS Greiner Woodward Clyde
engineer - URS Geiner Woodwark Clyde
general contractor - Continental Building Systems

construction

project delivery - design, bid, build
construction date - from march 2000 to january 2001
total project cost - 7 million dollars

mep

- 7 roof top units varying from 2000 to 43000 CFM capacity
- VAV control system
- central core contains elevators, stairs, restrooms
- 300 KVA transformer delivering 208/120V three phase power
- 277V, 4' wide, flourescent with T8 typical

David W. Lee
Structural Option

<http://www.arche.psu.edu/thesis/eportfolio/2007/portfolios/DWL141/>