

Newseum & Freedom Forum Headquarters

Ryan Wise - Lighting/Electrical option

Washington, D.C.



Architecture/Features

Occupancy: Mixed use - Gallery/Exhibits, office, retail, residential, 500 seat theatre

Size: 550,000 sf

Stories: 7

Overall cost: \$200 million

Construction Dates: 2003-November 2007

Delivery Method: Design-bid-build

- 60 ft. high plane of marble on the south facade engraved with the first ammendment
- Berlin Wall exhibit including Check Point Charlie, and 9/11 exhibit including the antaena from the World Trade Center Building

Mechanical

- (4) 742 ton cooling towers giving a total flow rate of 5,940 gpm
- Uses radiant floor heating system
- Conditioned air into display cases to control humidity

Project Team

Architect: Polshek Partnership Architects, LLP

General Contractor: Turner Construction Company

Lighting Design: Brandston Partnership, Inc.

MEP Engineer: Flack & Kurtz Consulting Engineers

Structural Engineer: Leslie E. Robertson Associates

Exhibition Plan & Design: Ralph Applebaum Associates

Lighting/Electrical

- Power supplied by PEPCO
- Newseum running on 460Y/265V 3P 4 wire
- Residential running on 208Y/120V 3P 4 wire
- 2250 kW generator for emergency lighting
- Use of daylighting with glass facade
- Galleries are primarily recessed down lights with accent lighting
- Offices use 2x2 fluorescent troffers

Structural

- Continuous poured concrete foundation against bentonite panels for waterproofing
- Concrete slab on metal deck flooring
- Superstructure composed of structural steel columns and beams
- Glass facade envelope with concrete slab roof deck



CPEP address: <http://www.engr.psu.edu/ae/thesis/portfolios/2008/rmw210/>