

Hawthorn Building

Penn State Altoona, PA

Walter Nichols

Lighting/Electrical Option

Primary Project Team

Building Owner: Penn State University

Architect: WTW Architects

Civil Engineer: Whitney, Bailey, Cox, & Magnani

MEP Engineers: H.F. Lenz Company

General Contractor: Lawruk Builders, Inc.

HVAC Contractor: SP McCarls, Inc.

Plumbing Contractor: Mervac Plumbing & Heating, Inc.

Electrical Contractor: Bettwy Electric, Inc.



Architecture

-58,8000 Sq. Ft.

-10,000 Sq. Ft. Comp. Center

-56 Faculty Offices

-24 Classrooms

Electrical

-Uses both 480/277V and 208/120V 3 Phase

-1200A 480y/277V main distribution panel

-600A 208y/120V sub-distribution panel

-9 stepdown transformers to power panels

-35KW 408y/277V 3 phase backup generator

Mechanical

-3 AHU's between 17,000-27,000 CFM

-1 AHU with 8,000 CFM and integrated DX coil for cooling purposes

-200 ton chiller for cooling

-4 1 mil. btu boilers for heating

-15 cfm per person supplied per person

Lighting

-Lighting runs at 277V and 120V

-Primarily fluorescent lighting

-Indirect lighting in computer labs

-Occupancy sensors used for energy savings and security purposes

-Dimming system with scene selections

-Suspended cylinder pendants in music room

Structural

-Rigid steel moment frame

-4" slab on galvanized metal deck

-2" composite reinforced with WWF

-5" slab on grade

Construction

Start Date: November 28th, 2003

Completion Date: January 1st 2004

Delivery Type: Design-Bid-Build

Project Cost: \$6.5 Million

Building COst: \$4.1 Million

