

# MODEL CLASSROOM DESCRIPTIONS AND REQUIREMENTS INDIANA UNIVERSITY, BLOOMINGTON

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## INSTRUCTIONAL AREAS

### DESCRIPTION

Project Booth, Small  
12 assignable square feet

### DEFINITION

A small enclosed space near the rear of the classroom that can house equipment securely and from which projection equipment can be operated. It is not large enough to provide workspace for a technician, but instead is constructed with enough space behind it so that an access door can be located there and a technician can reach into the space to set up or adjust equipment.

### WEB LINKS

For those who are accessing this material on the Internet, the following links are available:

- [Advanced Technology Classroom \(Type IV\)](#)
- [Video Origination Addendum](#)
- [Projection Booth, Large](#)
- [Media Equipment Closet](#)
- [IU Building Design Standards](#)
- [IU Electrical Standards](#)
- [IU Mechanical Design Standards](#)
- [Building Telecommunications Design Guidelines](#)
- Notes Regarding Classroom Technology, Renovation, and Construction

## **SPECIAL ROOM REQUIREMENTS**

### *IU Design Standards*

#### Architectural

Dimensions: 4' w. x 3' d. at minimum (If 2 projectors are installed, dimensions of booth must allow projectors to be centered on projection screens.)

- Projection window 4' above finished floor, window maximum size to accommodate all image projection technologies
- Projection shelf 30" deep and 4' long, nearly filling space
- Provide at least 36" of work space between the booth and rear wall of the classroom
- Floor to deck walls
- Door on rear wall of booth

### *IU Engineering Standards*

#### Mechanical

- Extend HVAC to Projection Booth with independent thermostat or thermostatically controlled exhaust fan or vent
- Introduce supply air low and remove exhaust air high
- Provide cooling for current equipment array and allow for expansion of cooling required to double current output
- Follow IU Engineering Standards for supply/exhaust in classroom

#### Electrical

##### Conduit Requirements

- 2" conduit from junction box in Media Equipment Closet (MEC) to Projection Booth per projector
- (2) 1 ½" from junction box in MEC to Projection Booth, landed in a series of (3) 3 gang junction boxes mounted vertically on the wall of the booth above the projection shelf. Connect second 3 gang box to first with (2) 1 ½" conduits, connect third 3 gang box to second with (1) 1 ½" conduit. Depending on individual circumstances, 3 gang boxes may be mounted horizontally.
- ¾" from junction box in MEC to Projection Booth, landed in a separate single gang box for slide projector and AMX controls (optional)
- ¾" from junction box in MEC to Projection Booth, for lighting control scene controller
- ½" conduit from junction box in MEC for relay solenoid control door lock (optional)
- 1" from audio junction box in MEC to a separate junction box in Projection Booth for speaker wires, landing in a 3 gang box on wall of projection booth. Conduit size to be reviewed for zoned system voice reinforcement.

### Lighting

- Dimmable light with independent control
- Lighting control scene controller for classroom
- Master programming controller for architectural dimming system may be located in projection booth only if it is separated from the dimming control panel. If the master programming controller and the dimming panel are integrated, the unit shall not be located in the projection booth but in the Electrical Equipment Closet or some other isolated location near the classroom [In most cases, this projection booth will be too small to house the programming controller.]

### Audio

- Provide line level sound jack in booth for 16mm film projection

### Power

- Provide one (1) dedicated 20 Amp circuit for power across counter in booth, with 3-4 duplex outlets
- Provide one (1) dedicated 20 Amp circuit for video projector(s), powering no more than two (2) projectors per dedicated circuit, one duplex outlet per projector
- Dedicated circuits defined above to be all on same phase
- Provide one (1) dedicated 20 Amp circuit for standard service wall outlets

### Telecommunications

- Install pathway according to IU Telecommunications Standard and specific campus addendums to bring voice, data, video coax, and fiber from source outside room (IDF closet) to a standard communications outlet in Projection Booth
- Provide one data jack at each projector location (optional)

## **EQUIPMENT REQUIREMENTS**

Following is a representative, generic list of classroom technology items for the Projection Booth; specific selections shall be in consultation with users and the university technology team.

- Video Projector(s)
- 35 mm slide projector (optional)
- 16 mm projector (optional)
- Video camera (optional)

## **LOCATION REQUIREMENTS**

Locate at rear of classroom with space behind to provide workspace for technician.