

MODEL CLASSROOM DESCRIPTIONS AND REQUIREMENTS INDIANA UNIVERSITY, BLOOMINGTON

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[Beverly Teach](#), Chair
All Campus Classroom Committee
Instructional Support Services
601 E. Kirkwood/Franklin Hall 0003
Bloomington, IN 47405-1223

INSTRUCTIONAL AREAS

DESCRIPTION

Project Booth, Large
42 assignable square feet

DEFINITION

A large enclosed space near the rear of the classroom that can house equipment securely and from which projection equipment can be operated. It is large enough to provide workspace for a technician.

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, Small](#)
- [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: 7' w. x 6' d. at minimum
- Projection window 4' above finished floor, window maximum size to accommodate all image projection technologies [Note: In a room with a sloped seating arrangement, an extreme projection angle might cause one to consider lowering the shelf.]
- Provide at least 28" clearance from the projection shelf to the ceiling (for 16mm large reel)
- Projection shelf 30" deep, shelf flush with bottom of the window
- Provide 36" work space between shelf and rear wall of booth
- Floor to deck walls
- Door from corridor and from inside classroom (if possible)

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.
- 1 ½" conduit from each camera position to Projection Booth if camera control unit is located in booth

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

Audio

- Provide line level sound jack in booth for 16mm film projection
- Provide at least one speaker, with independent volume control, for distributed sound
- Provide at least one speaker, with independent volume control, for program sound
- Volume controls for above speakers may be located on the speakers if the speakers are within easy reach, otherwise they should be located on the wall.
- Provide volume control for house program source

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 technician rack if located in booth
- 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 made 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.