

MODEL CLASSROOM DESCRIPTIONS AND REQUIREMENTS INDIANA UNIVERSITY, BLOOMINGTON

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INSTRUCTIONAL AREAS

DESCRIPTION

Project Booth, Small
17.5 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](#)
- [Media Equipment Closet](#)
- [Projection Booth, Large](#)
- [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 Requirements

- Dimensions: 5' w. x 3.5' 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 5' long, nearly filling space. Shelf flush with bottom of the window glass.
- 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
- Provide 2 full room lengths of unistrut fastened directly to floor deck above for projector and camera mounting. First piece to be parallel to and 12" from projection booth window. Second piece to be 18" from projection booth window. Area below unistrut to be free of mechanical and electrical equipment.

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 conduit rack in Media Equipment Closet (MEC) to Projection Booth per projector
- (2) 1 1/2" from conduit rack in MEC to Projection Booth, landed in a series of (2) 3 gang junction boxes (minimum 3 1/2" deep) mounted vertically on the wall of the booth above the projection shelf. See attached schematic diagram for layout of junction boxes in projection booth.
- 3/4" from conduit rack in MEC to Projection Booth, landed in a separate single gang box for male slide projector control jack.
- 3/4" from Projection Booth to lighting control system, for lighting control scene controller
- 1/2" conduit from conduit rack in MEC for relay solenoid control door lock (optional)

- 3/4" from conduit rack in MEC to a separate junction box in Projection Booth for speaker wires, landing in a 2 gang box on wall of projection booth. Install second 3/4" conduit from this box to projection booth ceiling space.
- 1 1/2" conduit from camera to MEC

Lighting

- Dimmable light (10% minimum) 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
- Provide volume control for house program source

Power

- Provide one (1) dedicated 20 Amp circuit for power below projection shelf with one 10A duplex outlet every 4', with a minimum of 3 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
- Above dedicated circuits to be all on same phase
- Provide one (1) dedicated 20 Amp circuit for two duplex outlets above projection shelf and for camera location.

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

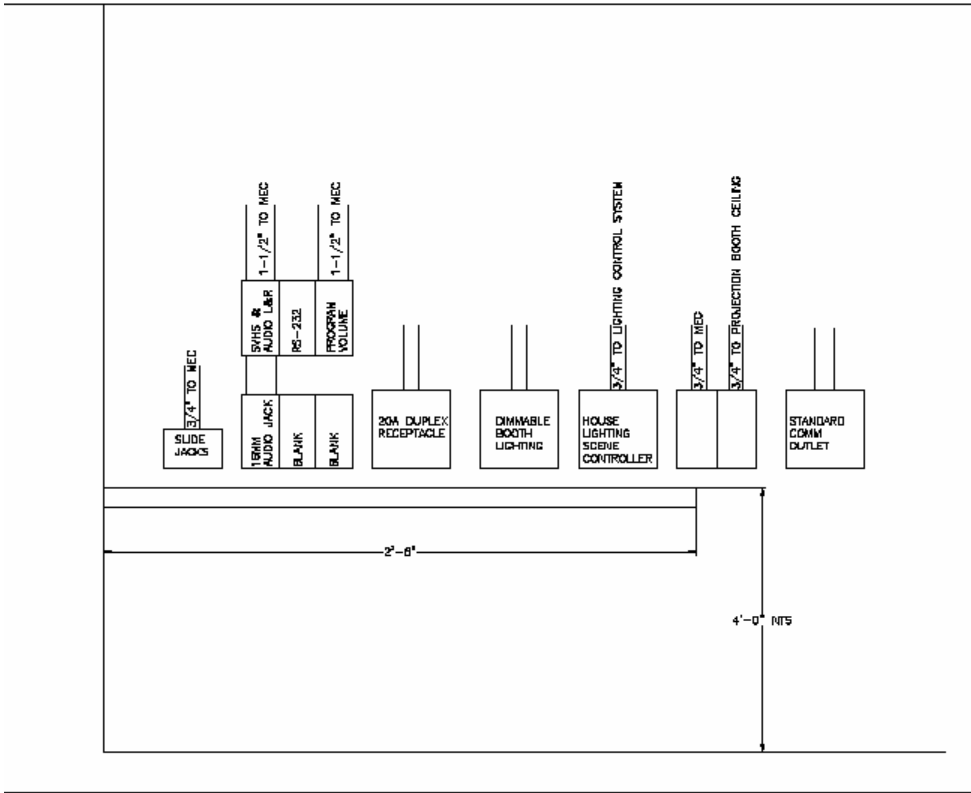
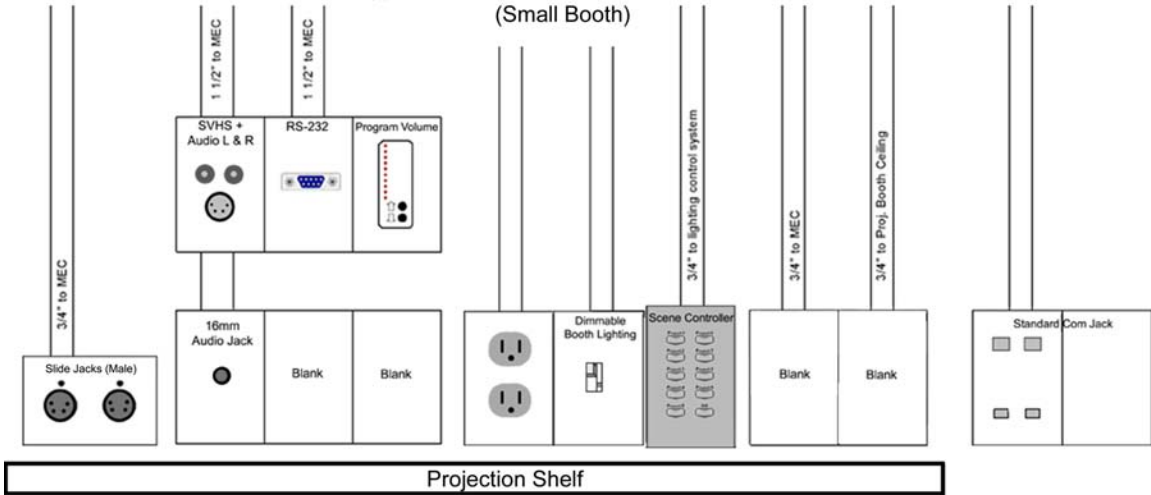
EQUIPMENT REQUIREMENTS

See Lecture Hall Building Equipment List

LOCATION REQUIREMENTS

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

Typical Booth Wall Switch/Jack Locations
(Small Booth)



INDIANA UNIVERSITY

 ARCHITECT'S OFFICE
 ENGINEERING SERVICES
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 BLOOMINGTON, IN 47403

DESIGNED BY: _____
 127 FIVE

PROJECT TITLE:
 LECTURE HALL BUILDING

TECHNOLOGY CLASSROOM
 PROJECTION BOOTH - SMALL

SHEET TITLE:
 JUNCTION BOX LAYOUT

DRAWN:	SEC
DESIGNED BY:	SEC
DATE:	06/20/02
WORK PERM. NO.:	
MEP PROJ. NO.:	
CAD FILE NAME:	
TRACING INDEX NO.:	
DISP. NO.:	BL
BLDG. NO.:	
SHEET:	1
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