

# MODEL CLASSROOM DESCRIPTIONS AND REQUIREMENTS INDIANA UNIVERSITY, BLOOMINGTON

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## INSTRUCTIONAL AREAS

### DESCRIPTION

Media Equipment Closet  
24 assignable square feet

### DEFINITION

The Media Equipment Closet (MEC) is a small room or closet located near the instructional station in most classrooms. It houses equipment rack(s) of media output, control, and security devices that are operated from a technology control system by the instructor. All new construction will include an MEC.

### 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](#)
- [Projection Booth, Small](#)
- [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 of the closet are 4' w x 6' d x 8' h (minimum)
- Install lockable roll-up door (30" w x 7' h)

- Design closet so that equipment is serviceable from the back without compromising security of equipment.

### IU Engineering Standards

#### Mechanical

- Install return duct in MEC.

#### Electrical

##### Conduit Requirements

The following installation of junction boxes and conduit will provide the connectivity among equipment items and locations described by this program.

- Install unistrut conduit rack in Media Equipment Closet or Cabinet. Install these conduit requirements with labeled pull strings in each conduit:
  - 3/4" from conduit rack to motorized screen if used
  - 3/4" from conduit rack to motorized shades if used
  - (2) 1 1/2" from conduit rack 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 boxes in projection booth.
  - 3/4" from conduit rack to Projection Booth, landed in a separate single gang box for male slide projector control jack.
  - 3/4" from conduit rack to nearest program speaker. All program speakers to be connected with 3/4" conduit.
  - 1" from conduit rack to master volume control box at presentation station.
  - 1" from conduit rack to junction box for future controls at presentation station.
  - 2" from conduit rack to each projector
  - 3/4" from conduit rack to each microphone input
  - 3/4" from conduit rack to architectural dimming system equipment in Electrical Equipment Closet (not the Media Equipment Closet)
  - 1 1/2" from a 2 gang box at each camera position to the Media Equipment Closet
  - (2) 2" conduits from conduit rack to Media Connectivity Outlet Interface Box (optional).
  - 2" conduit from conduit rack to opposite closet in room terminating 8'AFF in both closets.
  - 3/4" from conduit rack to a separate junction box in Projection Booth, if provided, for speaker wires, landing in a 2 gang box on wall of projection booth.
  - Shop drawings for audio system must include speaker layout, conduit routing, and wire fill and be reviewed by the technology specialists. See audio requirements for additional conduits needed.

### Power Requirements

- Provide 20 Amp dedicated circuit on same phase as other media components for each equipment rack
- Provide power strips in each equipment rack with adequate number of duplex receptacles (minimum 16) to handle all equipment in rack(s); power strips should have 4" between each duplex receptacle
- Dedicated surge protector for each rack
- Provide separate 120 Volt circuit for security, located next to security panel (IUB required)

### Lighting Requirements

- Provide general room light on independent switch inside service door, 50 foot candles minimum. Light to be mounted a maximum of 20" above equipment rack.
- Master programming controller for architectural dimming system may be located in Media Equipment Closet only if it is separate from the dimming control panel. If the master programming controller and the dimming panel are integrated, the unit shall not be located in the Media Equipment Closet but in the Electrical Equipment Closet or some other isolated location near the classroom
- Serial (RS-232) type audio visual interface for communication with technology controller

### Telecommunications

- Install pathway according to IU Telecommunications Standard and campus specific addendums to bring voice, data, video coax, and fiber from source outside room (IDF closet) to two standard communications outlets in the Media Closet. One outlet to be supplied with coax jack.
- Install pathway according to IU Telecommunications Standard to bring a communication outlet (phone with RJ31X jack and data) to the security panel in the Media Equipment Closet (IUB)

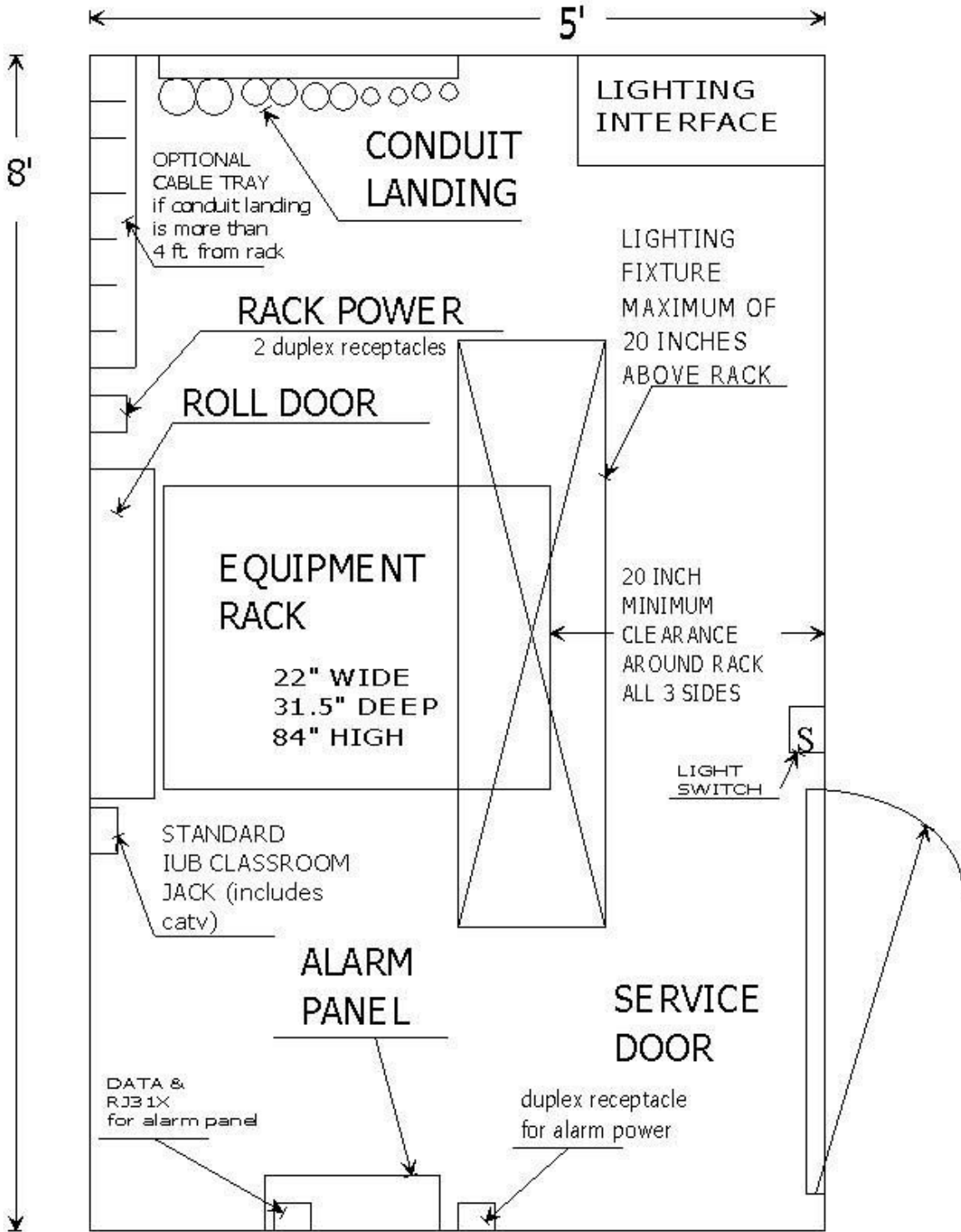
### Equipment Requirements

See Lecture Hall Building Equipment List.

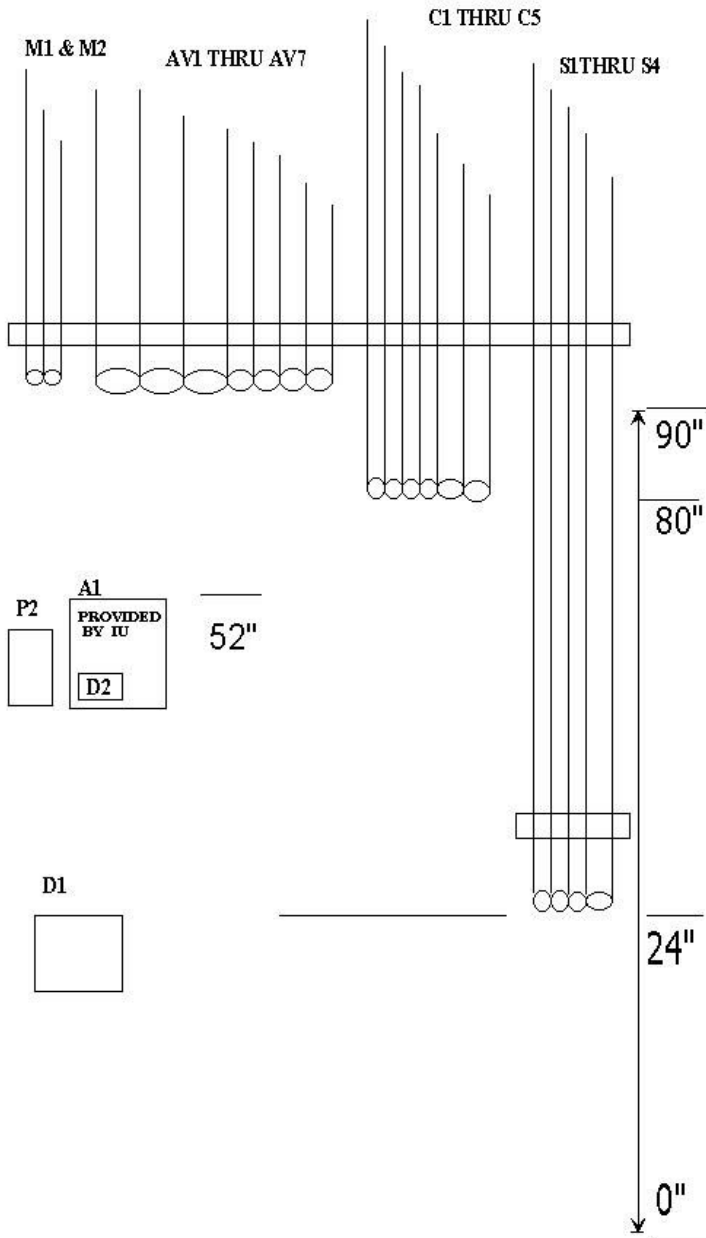
## **LOCATION REQUIREMENTS**

Locate near the instructor station at the front of the room, preferably to allow instructor to see the rack. Locate so that equipment rack(s) are accessible from the rear as well as from the front. Access to the equipment closet from the corridor is highly preferable.

# Typical or recommended layout of Media Equipment Closet



typical or recommended elevations  
of Media Equipment Closet  
conduit landings



**LEGEND:**

M1	3/4" to microphone input
M2	3/4" to microphone input
AV1	2" to projector
AV2	2" to projector
AV3	2" to aux. A/V closet on opposite side in front of room
AV3	1 1/2" to booth
AV4	1 1/2" to booth
AV5	1 1/2" to camera
AV6	1 1/2" to camera
C1	3/4" to lighting controller
C2	3/4" to screen controller
C3	3/4" to shades controller
C4	3/4" to booth for slide control
C5	1" to presentation-station master volume control box
C6	1" to presentation station for optional controls
S1	3/4" to program speakers
S2	3/4" to distributed speakers
S3	3/4" to volume-controls box for booth monitors
A1	security alarm panel
D1	standard IUB classroom jack (includes CATV)
D2	RJ31X / data for security
P1	2 duplex A.C. receptacles
P2	A.C. receptacle for security