



MEDIA EQUIPMENT CLOSET DESCRIPTION AND REQUIREMENTS INDIANA UNIVERSITY, BLOOMINGTON

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DEFINITION

The Optional Media Equipment Closet (MEC) is a small room or closet located near the instructional station in classrooms requiring a more than usual amount of media equipment. The need for this closet has dwindled as technology has improved and equipment size has shrunk. The closet houses equipment rack(s) of media output, control, and security devices that are operated from a technology control system by the instructor. Locate near the instructor station at the front of the room, with the rack facing the side of the room. 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.

SPECIAL ROOM REQUIREMENTS

IU Design Standards- Architectural

- Dimensions of the closet are 4' x 6' x 8' high (minimum)
- User access to the closet to be from a framed opening without a door. The frame size to be determined by the size of the equipment rack needed. In most cases the framed opening should be 20" w x 84" h.
- Install lockable door (30" w x 7' h) for rear access.
- Design closet so that equipment is serviceable from the back without compromising security of equipment.

IU Engineering Standards- Mechanical

- Extend HVAC to Media Equipment Closet with independent temperature control or thermostatically controlled exhaust fan
- Introduce supply air low and remove exhaust air high in MEC
- Provide cooling for current equipment array (typically 2000btu/hr). Consider more cooling capacity if equipment needs are likely to expand.

Electrical Conduit Requirements

Install a conduit rack on a side wall of the MEC and land these conduits on the conduit rack with labeled pull strings in each conduit.

- $\frac{3}{4}$ " from conduit rack to motorized screen controller if used
- $\frac{3}{4}$ " from conduit rack to motorized shades controller if used
- 1 1/2" from conduit rack to each projector location
- $\frac{3}{4}$ " from conduit rack to nearest program speaker. All program speakers to be connected with $\frac{3}{4}$ " conduit

- 3/4" from conduit rack to nearest distributed ceiling speaker
- 1/2" from conduit rack to each microphone input
- 3/4" from conduit rack to dimming system controller if used
- 1 1/2" from a 2-gang box at each camera position to the conduit rack
- 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
- If projection booth exists, install these conduits:
 - (2) 1 1/2" from junction box 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 junction box to Projection Booth, landed in a separate single gang box for slide projector controls (optional)

Power Requirements

- All electrical power for media equipment (i.e., media equipment closet receptacles or receptacles dedicated to media equipment, projector(s), projection booth receptacles) shall be on dedicated circuits on the same phase from the same electrical panel.
- Provide a quad power receptacle (2 duplex) 20 Amp dedicated circuit for each equipment rack. Install this receptacle on opposite side wall from conduit rack.
- Separate all power cabling from low voltage wiring.

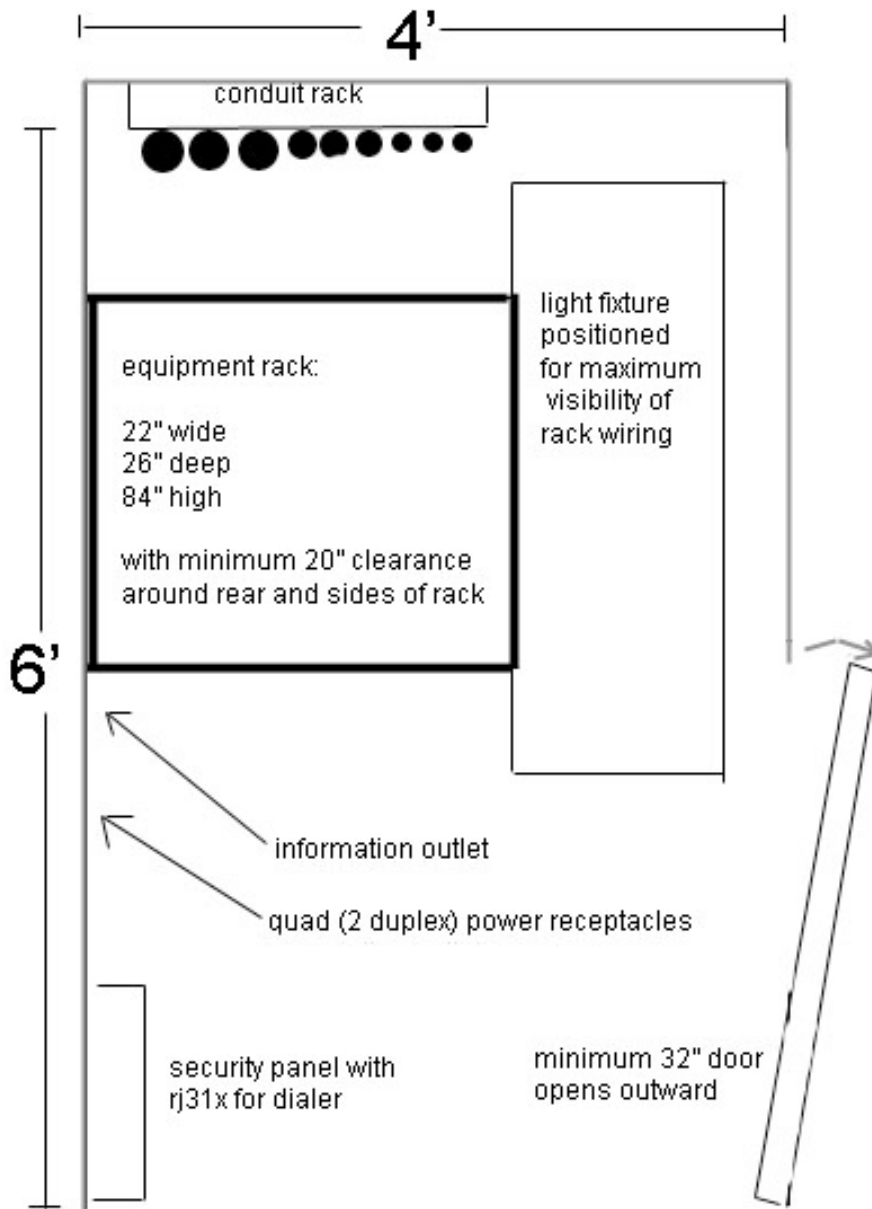
Lighting Requirements

- Provide general room light on independent switch, 50 foot candles minimum
- Provide a serial (RS-232) type interface for communication with technology controller. Locate this interface on the opposite side wall from the conduit 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.

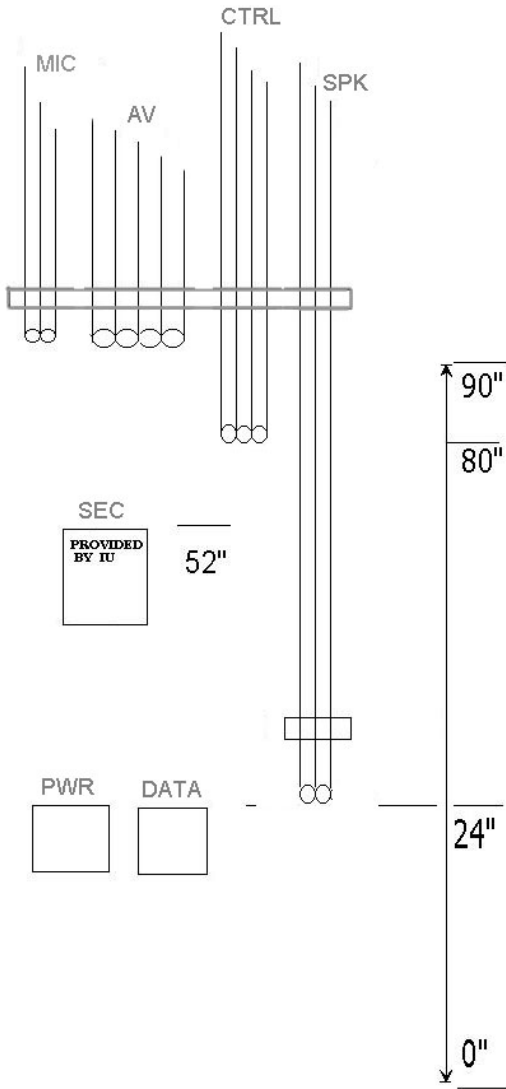
Telecommunications

- Install pathway according to IU Telecommunications Standard and campus specific addendums to bring a 4-port IU Information Outlet for each equipment rack into the Media Closet. Locate this outlet on the opposite side wall from the conduit rack.
- Install wall mounted IP phone by Media Equipment Closet if closet is in classroom or near technology lectern location if Media Equipment Closet is not in the classroom. Install per IU Telecommunication Standards.
- Install pathway according to IU Telecommunications Standard to bring a 1-port IU Information Outlet to the security box in the Media Equipment Closet (IUB), typically located on the side wall opposite the conduit rack
- CATV and fiber optic requirements to be reviewed by Campus Technology Design team.

Typical layout of Media Equipment Closet:



Elevation of typical conduit landings in MEC



LEGEND

- MIC* = 1/2" to microphones
- AV* = 1 1/2" to projectors and cameras
- CTRL* = 3/4" to lights, screen, and shades controllers
- SPK* = 3/4" for distributed and program speakers
- PWR* = quad power receptacle
- DATA* = standard IU information outlet
- SEC* = security panel requiring RJ31x phone jack