

Last Update: July 1, 2009

A. Introduction:

1. The Association for the Assessment and Accreditation of Laboratory Animal Care (AAALAC) uses the NIH Guide for the Care and Use of Laboratory Animals as a basis for its accreditation of institutions. All Lab Animal Housing units designed for use by any University department must meet the minimum standards outlined in the Guide for the Care and Use of Laboratory Animals.
2. You can order a copy of the Guide from the National Academy of Sciences, Institute of Laboratory Animal Resources Commission on Life Sciences, National Research Council, National Academy Press, Washington, D.C. The Guide may also be viewed at the following web address:

<http://www.nap.edu/readingroom/books/labrats/>
3. Even when these are followed, there are specific requirements and limitations that need to be kept in mind when designing projects at Purdue University. Descriptions of these specific items can be found in the following sections.

B. General Design Considerations

1. Corridors shall be a minimum 7'-0" wide.
2. Windows are not permitted in animal rooms.
3. Doors:
 - a) Doors in all animal room doors shall be 42 inches (W) x 84 inches (H) and open into the animal room. Doors will be hollow metal with glass lite and stainless steel doorframe.
 - b) Door closer to have delayed action feature (LCN 4040 DEL)
 - c) Lockset with knob trim inside room and flush ring pull to corridor side (Builder's Brass No. 168). Provide entrance function locksets.
 - d) Weather-stripping to be equal to Reese 797 and door bottom to be equal to Reese 772.
 - e) Doorframes shall be prepared for an electric strike cutout and pocket for VD6210-12V dc-32d and a VD6210-12vdc-32D continuous duty-fail secure electric strike installed.
4. Walls and ceilings
 - a) Walls and ceilings in all animal rooms shall be smooth, sealed and seamless.
 - b) Animal room walls to be constructed of pre-glazed concrete masonry (Spectra Glaze) with epoxy grout with no voids in the masonry (to reduce vermin).
 - c) Alternate wall construction to be metal stud wall framing with one layer moisture-resistant drywall and rigid PVC wall panels equal to Mipolam "Wall System T," 2 mm thick sheets.
5. Floors:
 - a) Floor finish in all animal rooms shall be waterproof epoxy resin, seamless and monolithic with integral cove to the wall.
 - b) Approved manufacturers:
 1. "Sanpro" by Sandstrom Products Co.
 2. Tnemec Series 200.

3. General Polymers

C. Electrical Design Considerations:

1. Use sealed, flush-mounted, fluorescent light fixtures; pendant-mounted fixtures are not acceptable.
2. Provide 30 fc, approximately one meter, above the floor. Animal room lights shall be controlled with auto-timer with switch override. Provide two levels of lighting, with one level on a timer and one on the switch.
3. Use water-sealed electrical receptacles, mounted 48 inches AFF.
4. All conduit and junction boxes shall be weatherproof to deter infestation of vermin.
5. Outside each animal room, there shall be a stainless steel recessed panel containing light switches, light timer for each animal cubicle, and mechanical gages for readouts for temperature and pressure.
6. Rough-ins shall be made for Marlok Control Equipment. Conduit needs to be stubbed to the doorframe at the door strike pocket, run to above the doorframe and terminated at a 4x4 box. Depending on the type of access control reader required, an additional wall box with conduit run up to the 4x4 doorframe box may be required. In high security rooms the conduit needs to be installed in the wall. Install blank cover plates on all open boxes.
7. Each animal room shall have its own mechanical or electronic light timer
 - a) Approved manufacturers:
 1. Paragon Electric Company, Inc., EC11D or equal.