2015 Consultant’s Handbook
Division 01 GENERAL

8813.1 SPECIAL REQUIREMENTS FOR ANIMAL CARE

2.4.2 Alternate wall construction may be metal stud wall framing with moisture-resistant drywall and rigid PVC wall panels.

2.5 Floors should be moisture resistant, impact resistant, seamless and monolithic with integral cove to the wall.

Note: Epoxy resins, hard-surface sealed concrete, methyl methacrylate, polyurethane, and special hardened rubber-base aggregates have proved satisfactory. Correct installation is essential to ensure the long-term stability of the surface.

3 Power and Lighting

3.1 In the event of a power failure, an alternative or emergency power supply should be available to maintain critical services and support functions in animal rooms, operating suites and other essential areas.

3.2 Use sealed, flush-mounted, light fixtures; pendant-mounted fixtures are not acceptable.

3.3 In general, provide 30 fc, approximately one meter above the floor for animal housing rooms.

3.3.1 Select proper illumination to meet specific and exceptional applications as required.

3.3.2 Animal room lights shall be controlled with auto-timer with switch override. Where required, provide two levels of lighting, with one level on a timer and one on the switch.

3.4 All conduit and junction boxes shall be weatherproof, sealed to deter infestation of vermin, mounted 48 inches above finished floor.

3.5 Outside each animal room, there shall be a water resistant recessed panel containing light switches, light timer for each animal cubicle, and mechanical gages for readouts for temperature and pressure, as required.

3.6 Rough-ins shall be made for card access systems for access to animal facilities.

3.6.1 Conduit needs to be stubbed to the doorframe at the door strike pocket, run to above the doorframe and terminated at a 4x4 box.

3.6.2 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.

3.6.3 In high security rooms the conduit needs to be installed in the wall.
4 Mechanical Guidelines

4.1 All penetrations shall be sealed watertight.

4.2 Where required, install a waste gutter with a sediment trap floor drain with a removable drain trap bucket to prevent material from clogging drains in animal rooms.

4.3 Minimize all exposed ductwork and piping. If ductwork must be exposed, it shall be stainless steel and have no exposed duct insulation. Provide access doors where required for equipment maintenance and to provide access for cleaning ductwork.

4.4 Exhaust grilles and supply diffusers should be corrosion resistant and able to be sanitized.

4.5 A visual indication of differential pressure should be installed close to the door of each room that has pressure requirements.

4.6 Mechanical equipment requiring maintenance should be located outside of the animal room.

4.7 If a heat recovery system is used, it should be “run around” with no means of cross contamination.

4.8 HVAC zone controls, including room temperature and humidity controls, should be housed in a corrosion resistant cabinet. Install the temperature sensor such that only a stainless steel or corrosion-resistant, waterproof plate is exposed inside the room.

4.9 In general, provide 10 to 15 fresh air changes per hours in animal housing rooms, unless a mechanical engineering evaluation indicates that more is required for a specific application.