Part 1 General

1.1 Summary

.1 Unless otherwise indicated, follow the standards below when planning for animal facilities. These standards are not intended to restrict or replace professional judgment.

.2 These guidelines should be read with the specific technical sections of McGill's Building Design and Technical Standards.

1.2 Codes & Standards

.1 "Guidelines on laboratory animal facilities - characteristics, design and development" issued by the Canadian Council on Animal Care, last version at http://www.ccac.ca/.

.2 "Canadian Biosafety Standards and Guidelines" issued by the Government of Canada.

1.3 Design Requirements

.1 Location:

.1 Separate animal facilities from offices and main pedestrian corridors to discourage unauthorized access as well as to mitigate odors.

.2 Do not locate animal facilities above electrical rooms, telephone/data rooms, or other rooms that could be damaged if water leaks down after wash-down of the animal rooms.

.3 Do not locate animal facilities near spaces that generate large amounts of noise or vibration. Within the animal facility, noise-generating equipment or noisy animals shall be sound isolated from the rest of the facility.

.4 Consider the need to provide ready access to an elevator that can be segregated and secured from the public for the transportation of animals, cages, feed, bedding, waste, etc. Consider whether there should be a dedicated elevator for the facility.

.5 The components of an animal facility (including but not limited to animal holding rooms, procedure rooms, surgery rooms, feed and bedding storage rooms, hazardous agents storage rooms, clean and dirty cage holding rooms, cage washing and sterilization rooms, necropsy rooms, animal care equipment storage rooms, and personnel areas such as offices, break rooms, and changing rooms) should be strategically organized according to function, should promote and facilitate biosafety, and should enhance efficient traffic flow (clean to dirty).

.2 Security:

.1 Consider the need for a closed-circuit television (CCTV) system for surveillance purposes.

.2 When positioned along a perimeter wall, do not install exterior windows in animal rooms. Exterior windows shall be reserved for spaces used solely for human occupancy, keeping in mind security requirements.

.3 Corridors:

.1 Main corridors shall be 2135mm (7') wide. Branch corridors shall not be less than 1676mm wide (5'-6'').

.4 Surfaces:

.1 Surfaces shall be constructed of materials that are durable, waterproof, and that allow for easy and frequent cleaning and sanitation. They must be seamless, free of cracks and crevices.

.2 Walls: Epoxy painted cement blocks with dense smooth surfaces are preferred. Water-resistant gypsum drywall-on-metal-stud partitions are also acceptable.

.3 Ceilings: Epoxy painted water-resistant gypsum ceilings are preferred. Vinyl-covered lay-in suspended ceilings with hold down clips are acceptable for personnel areas and pedestrian corridors.

.4 Floors: Smooth texture acid and solvent resistant monolithic floors with integral cove bases are preferred. There should be a smooth junction between the bottom edge of the wall and the upper edge of the cove bases (i.e. no ledge).

.5 Walls shall be protected with bumpers or guard rails. Projecting items such as thermostats are undesirable, but if absolutely necessary shall be protected with bumpers or guards.

.6 Exposed overhead pipes and conduits are undesirable, but if absolutely necessary, the penetrations shall be sleeved and sealed. All floor penetrations shall have sleeves and be watertight.

.7 Above-ceiling devices requiring service or maintenance are undesirable, but if absolutely necessary, shall be provided with waterproof access panels. Utility valves should be located above the corridor ceiling.

.5 Doors:

.1 To allow for easy passage of cages and equipment, doors shall be 1200mm wide by 2135mm high (48''x84'') minimum and shall open into the rooms to not impede traffic flow.

.2 Doors and frames must be in metal and be completely sealed or filled with foam to prevent, with tight fitting self-sealing door sweeps to prevent access to vermin. See section 08 71 10 Hardware for preapproved hardware sets.

.3 Animal areas need to be secured to only authorized personnel. Provide access control using card readers.

.4 Consider windows in the doors to prevent collisions of persons entering/existing (consider universal accessibility when planning the height of these elements) as well as to allow observation into the rooms as a safety feature.

.5 Consider the need for interlocking doors as physical and operation barriers.

Part 2 Related Technical Sections

The technical sections of the McGill Building Design and Technical Standards should be consulted with the current document, most notably (but not limited to) the following:

Section Number	Title of Section
Special Building Areas	**Laboratories**
07 92 10	**Joint Sealing**
08 11 14	**Metal Doors and Frames**
08 71 10	**Hardware**
09 22 27	**Suspended Ceiling**
09 91 26	**Painting**
09 65 16	**Resilient Sheet Flooring**
23 00 00	**Heating, Ventilation and Air Conditioning**
26 00 00	**Electrical**

END OF SECTION