A. Sound abatement is an important consideration in the design of a project. The wall design of the facility must ensure that all offices, classrooms, and labs will be insulated from unreasonable outside sources of noise. Mechanical and electrical rooms, and other major noise and vibration sources, (including noise generated by vehicular traffic) should be separated from spaces that would be sensitive to such intrusion. Whenever possible, walls should extend to the slab above, other interstitial spaces should be closed, and penetration of utilities should be sealed to provide the desired acoustic isolation. The HVAC system should use ducted returns. Relative to sound attenuation, plenum returns are undesirable. Mechanical and electrical rooms are to be constructed of masonry walls with slab-to-slab construction.

In addition, anticipated noise levels that will be generated by equipment and occupants of the building shall be determined and sound transmission coefficients (STC's) of walls, floors, and other elements of enclosure needed to maintain acceptable noise levels shall be specified. The noise levels within a space should not exceed 40 dB for executive offices and conference rooms, 45 dB for general offices, 40 dB for classrooms, and 55 dB for laboratories. The minimum Sound Transmission Coefficient (STC) levels must be 45 STC between offices, 35 STC between a laboratory and adjacent spaces, and 45 STC between instructional space and all other spaces (measurements with doors closed).

B. It is preferable for partitions to be full height, floor to underside of pad or roof above, in areas requiring security, sound isolation and in compliance with code. Fire-rated walls shall be specified in accordance with code requirements.

C. Durable wall finishes shall be specified to minimize maintenance. Painted drywall is the preferred finish for maintenance reasons. Wall covering is strongly discouraged.

D. Walls specified to receive wallcovering shall be sealed prior to application of wallcovering. Adhesive used shall be as recommended by manufacturer of wallcovering. Extra materials (minimum of 5%) shall be labeled and submitted to customer. Cleaning and maintenance instructions shall also
be submitted to customer.

E. Masonry walls with bullnose corners are preferred for academic buildings. Glazed CMU block is recommended for corridor walls with coved base and bullnose corners.

F. Include corner guards on exterior corners in heavy traffic areas.

G. Toilet room walls to have ceramic tile wainscot to a minimum height of four feet above finished floor.
A. Acoustical 2' x 2' lay-in ceiling tiles shall be specified for all interior areas with the exception of restrooms, special use or public spaces.

B. Acoustical ceiling tile shall have the following characteristics:
   - Materials: Mineral fiber ceiling panel
   - Size: 24" x 24" x 5/8"
   - Style: Lay-in, non-directional fissured pattern, square edge
   - Color: White
   - ASTM E 84 compliance: Class A; flame spread: 25; smoke developed: 10
   - Noise Reduction Coefficient (NRC): 50 (minimum)
   - Ceiling Attenuation Class (CAC): 30 (minimum)
   - Recycled Content: 20% (minimum)
A. Durable as well as appropriate floor finishes throughout a building are a high priority for maintenance and safety reasons.

B. Interior concrete floor areas, which are scheduled to receive paint, shall be painted and sealed with a non-slip epoxy finish. Concrete floors shall be cleaned and etched prior to painting using muriatic acid as required by manufacturer's recommendations.

C. Resilient tile shall be acceptable for classrooms, offices, corridors, administrative areas, departmental/college areas, elevator cab interiors, fast food service areas, custodial storage rooms, and copy rooms for ease of maintenance. Resilient tile floors shall be cleaned, sealed, and polished by the construction contractor in accordance with the manufacturers’ specifications. Vinyl composition tile shall be asbestos free. For any installation involving existing VAT, refer to Section 1, Environmental Health and Safety.

D. Flex-tuff or equal, entrance and vestibule mats shall be installed in all public entrances.

E. The use of carpet is strongly discouraged except for aisles of lecture halls and Dean's/Departmental Chairperson's offices/suites. Provide molded nosing for steps and transition strips between carpet and adjacent material when carpet is specified.

The grade of carpet quality shall be determined by space needs. Specify carpet with the following characteristics, as a minimum and unless project requirements dictate otherwise.

1. A minimum face weight of 24 ounces per yard of commercial quality nylon, type 6.6, solution dyed, with soil resistance.

2. 100% synthetic backing with permanent moisture barrier to eliminate absorption (below grade installations).

3. An electrostatic propensity of 1.5 KV or lower, anti-static.

4. Direct glue down installation using adhesive recommended by carpet manufacturer. Where used, underpad to be either hair and jute or synthetic foam.
9.03 Floor Finishes

5. Fiber Colorfast.

6. 10 year warranty on wear and edge ravel (delamination) and color-fastness to light.

7. Conform to applicable code for flame/fuel/smoke rating requirements in accordance with latest ASTM requirement. Carpet shall meet ADA minimum coefficient of friction of .6 for accessible ramps.

8. Concrete shall be sealed prior to carpet installation.

9. Discontinued products or end-of-runs are unacceptable.

10. Extra materials (5% or 50 square yards maximum) are required for each type and color of carpet specified and shall be delivered to the Department of Operations and Maintenance.

11. Each type of carpet shall be from one dye lot only.

F. Vinyl or rubber rolled goods are acceptable for elevator cab interiors. Preformed stair treads are preferred for stairs. A diamond pattern provides a more maintainable surface and is preferred.

G. Terrazzo is acceptable for vestibules/entrances/lobbies, corridors and food service areas. Walk-off mats should be considered for entrance areas.

H. Quarry tile with double abrasive grain, is acceptable for food preparation areas, serving areas behind counters, laundries, and dishwashing areas. Grout should be sealed.

I. Wood flooring is acceptable for dance floors, handball courts, basketball courts, racquetball courts, gymnasiums, and other sports activity areas and also where required for acoustical treatment.

J. Seamless flooring and coved base shall be acceptable for animal care facilities and "clean" rooms.

K. Coved Vinyl or rubber base are acceptable with resilient tile and/or carpet.