

1.0 GENERAL

1.1 UBC Related Guidelines

- .1 UBC Technical Guidelines
- .2 Classroom Standards

1.2 Coordination Requirements

- .1 Campus & Community Planning.
- .2 UBC Building Operations - Technical Services.
- .3 Coordinate Wall Finishes with Acoustic Consultant.

1.3 Acoustic Requirements

- .1 An Acoustical Engineering review is required for all educational facilities.
- .2 Ensure acoustic compatibility of all systems and materials.
- .3 Classrooms and labs to comply with latest sound reflectance and absorption criteria. (The Classroom Guidelines, (last updated 1997), are outdated in 2008 and are currently being revised. To discuss Classroom Guidelines please contact the Project Manager, Enrollment Services, Phone: 604-822-4175).

1.4 Environmental Requirements

- .1 Always consider the use of recyclable, recycled, non-toxic, low maintenance and durable finishes.
- .2 Wherever possible utilize water-based, low or non Volatile Organic Compound (VOC) type adhesives.

1.5 Floor Finishing (Scrubbing) Procedures

- 1.1 The first step prior to commencing the floor care process is to complete a detailed construction cleanup of the immediate surrounding area. This includes wiping down of all vertical and horizontal surfaces ensuring all soil and dust is removed. This will help prevent contamination of the finish when applied.
- 1.2 The entire room should be emptied of all furniture and other objects. This will allow the service workers the ability to complete the floor care procedures efficiently and safely.
- 1.3 The floor surface must be vacuumed thoroughly to ensure all loose soil has been removed.
- 1.4 The entire floor surface must be scrubbed with a neutral floor cleaner. The neutral floor cleaner must be spread evenly over the floor surface in 10 ft x 10 ft sections. Continue doing 10 ft x 10 ft sections until the floor surface is completely scrubbed.
- 1.5 The clean, dry surface will be finished (waxed) with a sealer / finish combination product called Buckeye Citation. This is a water based floor finish that is easily applied to clean surfaces in thin even coats. A total of five coats of Citation floor finish must be applied in thin coats and evenly over the entire surface. The floor finish must be allowed to dry for a minimum of 60 minutes between each coat. This drying time between coats allows the moisture within the finish to evaporate and fuse each coat together for a strong, level, hard surface and prepares the floor surface for the final procedure.

- 1.6 When the five thin coats of finish (wax) has been applied and has properly fused each coat together the floor must be allowed to cure for at least 12 hours prior to commencing the final burnishing procedure.
- 1.7 This is the final step in the floor care process and is very important. This burnishing procedure must be performed using a clean burnishing pad and a burnishing machine that operates at no less than 1500 RPM. The floor must be free of all soil and stains prior to burnishing. The burnisher smoothes and hardens the finish surface thus making it resistant to all scuffmarks, spills and normal daily abuse. A burnished floor surface allows for easy maintenance and if maintained properly will prevent future stripping of the floor surface and will also prevent the replacement of the flooring years down the road. The final floor care procedure allows the service workers at UBC, to maintain the floors using a full restoration program.
- 1.8 All equipment and supplies used to perform this detailed floor work must be clean and in good working condition to ensure the best results.

IMPORTANT: These detailed specifications must be followed according to the University of British Columbia's standard. Nothing less than this standard will be accepted or approved.

2.0 FLOORS

2.1 Mat Wells

- .1 Mat wells of any design, shall not be used. Walk-off mats shall be used at UBC. (See 2.2.12).
- .2 Institutional Grade Entry Mats are required in all entries to reduce cleaning, and to provide sufficient non-slip flooring at entrances.

2.2 Flooring Materials and Design Requirements

- .1 Seal Mechanical and Service Room Floors with urethane elastomeric membrane flooring per Section 09700.
- .2 Linoleum to be excluded from washrooms, baths, showers and labs.
- .3 Epoxy coatings to be excluded from showers, use non-slip finish tiles (non-glazed finish).
- .4 Wherever possible use low toxicity and/or sustainable materials.
- .5 Hardwood Floors - refer to Section 09640 for finishing standards.
- .6 Ceramic or Commercial Resilient Flooring: to be used in high traffic areas such as building entrances, corridors, hallways, laboratories, classrooms, coffee areas and lunch rooms. Ceramic tiles are to be used in washrooms. This requirement applies to both new and replacement installations. Only slip resistant materials should be used in wet areas, especially building entrances.
- .7 Carpet, (preferably carpet tile), is to be specified for enclosed administration offices, open administration areas, staff conference and meeting rooms.
- .8 Carpet, (preferably carpet tile), may be used in lounge areas where food is not available; otherwise use linoleum wherever possible.

- .9 For ease of cleaning, linoleum is preferred in undergraduate areas.
- .10 In large lecture theatres or other areas where fixed seating occurs, use resilient flooring for ease of maintenance. Consideration must be given to acoustic treatment other than carpet as a floor finish.
- .11 Laboratory Flooring: Heat welded sheet vinyl flooring, or polished concrete with dustproof hardener. Confirm with UBC Health Safety and Environment for any special requirements for laboratories using radioisotopes. Sealer on concrete floors must be acid resistant. Choice of flooring must reflect slip resistance required for the installation.
- .12 Walk-off mats at exterior doors are required to be Milliken "First Appearances, Brush Off".

3.0 SIESMIC RESTRAINT

- .1 Design for the seismic restraint of shelves, cabinets, fixtures and vending machines, according to BC Building Code 4.1.8.17 and Table 4.1.8.17 (Item 11) for the Structural Restraint of Non- Structural Components.
- .2 Lobby Areas to suit future seismic restraint for vending machines

4.0 WALLS

4.1 Materials

- .1 Ensure lower 3' of walls in high traffic areas are abuse resistant (i.e. chair rails or wall bumpers and corner guards)
- .2 Behind showers or tubs use cement board clad with plastic tub surrounds.
- .3 Standard Public Spaces:
 - .1 Regarding interior colours, so as to minimize Building Operations' storage, costs and wastage, it is recommended that colour selections for public space wall areas be made from General Paint's Neutral Colours brochure or equivalent. Refer to the Section 09900 in the UBC Technical Guidelines.
 - .2 Where wood finishes that clad walls require fire retardant, use only pressure-treated fire retardant, not surface-applied.
 - .3 Where drapery is required to be fire retardant, use only inherently permanent fire retardant fabrics. (Fabrics manufactured utilizing Trevira and/or Avora polyester fibers are considered inherently fire retardant).

5.0 CEILINGS

5.1 Material

- .1 Concealed-spline ceilings are not acceptable.
- .2 Minimize use of ceiling material - expose where possible.
- .3 Use only ceilings that are easily accessible and that can be removed and replaced by the service trades without damage and without requiring other tradesmen or special equipment. It should be noted that drop-down tiles with reveal edges are weaker than standard tiles.

- .4 Fire resistant ceilings that require the use of hold down clips must not be used.
- .5 Coordinate noise reduction coefficient and sound reduction coefficient with an Acoustic Consultant.

6.0 ARTWORK

- .1 Seismic restraint of Artwork is required.
- .2 Coordinate structural attachment and seismic restraint of artwork with Structural Engineer.