1.0 GENERAL

1.1 Related Work and UBC Guidelines

.1 Division 03 and relevant TG sections therein
.2 Division 04 and relevant TG sections therein
.3 Division 05 and relevant TG sections therein
.4 Division 06 and relevant TG sections therein
.5 Division 07 and relevant TG sections therein
.6 Division 08 and relevant TG sections therein
.7 Division 09 and relevant sections therein
.8 Section 10 00 10 Special Room Requirements
.9 Section 20 00 05 Mechanical General Requirements
.10 Section 26 05 00 Electrical - General Requirements
.11 Section 27 05 05 Communication Rooms Design Guidelines
.12 Section 27 41 52 Listening Assist Systems
.13 UBC Campus Plan Design Guidelines
.14 Learning Space Design Guidelines
.15 UBC LEED Implementation Guide
.16 UBC Resilience-Based Design Guide for Nonstructural Systems

1.2 Related External Documents

1. Latest edition of the British Columbia Building Code (BCBC).
2. Latest edition of the MPI Architectural Painting Specification Manual.
3. Latest edition of the Tile Installation Manual by the Terrazzo Tile and Marble Association of Canada.

1.3 Description

1. The Guidelines apply to all work completed within buildings on both UBC Vancouver and UBC Okanagan campuses unless stated otherwise.

1.4 Coordination

1. In instances where conflicts are found between these guidelines and provincial regulations or codes, please notify the UBCV Technical Review Team Architect or UBCO Facilities Management.
2. These guidelines are intended to be read by design consultants and their content integrated into construction drawings and specifications. Construction documents are not to reference the technical guidelines directly.
3. The Coordinating Registered Professional (CRP) is required to coordinate these requirements with other disciplines.

2.0 DESIGN AND PERFORMANCE REQUIREMENTS

These are requirements specific to UBC that may not exist in codes or other jurisdictions. Any deviations from these guidelines requires a variance to be granted.

2.1 Design Requirements – General

.1 Acoustic Requirements:
  .1 An Acoustical Report is required to be prepared for all core facilities.
  .2 Acoustical Report to coordinate acoustic requirements for learning spaces as per Section 10 00 10 Special Room requirements.

.3 Coordinate wall, floor and ceiling assemblies and finishes with the Acoustical Report for the project.

.2 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.

.3 Electrical Requirements
- .1 No electrical equipment shall be concealed by architectural finishes, furniture, artwork, bulletin boards or other similar items that would delay identifying their location in an emergency.
- .2 Coordinate with 2.1.11, Section 26 51 00 Interior Building Lighting for decorative lighting requirements.

2.2 Design Requirements - Floors

.1 Wherever possible use low toxicity and/or sustainable materials.
.2 Linoleum flooring to be excluded from washrooms, baths, showers and labs.
.3 Epoxy coatings to be excluded from showers, use slip-resistant tiles (non-glazed finish).
.4 Hardwood Floors - refer to Section 09 64 00 Wood Flooring for finishing standards.
.5 Low Maintenance (non-wax preferred) Commercial Resilient Flooring: to be used in high traffic areas such as building entrances, corridors, hallways, laboratories, classrooms, coffee areas and lunch rooms. Only slip resistant materials should be used in wet areas, especially building entrances.
.6 Ceramic Flooring: Slip-resistant ceramic tiles are to be used in washrooms.
.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 services are not available; otherwise use linoleum flooring wherever possible.
.9 For ease of cleaning linoleum flooring 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 – refer to the Learning Space Design Guidelines and Section 10 00 10 Special Room Requirements for appropriate material choices.
.11 Exposed concrete in stairs and floors to have a stain resistant sealer.
.12 Seal mechanical, electrical and other service room floors with membrane flooring per Section 09 67 00 Fluid Applied Flooring.
.13 Laboratory Flooring: Heat welded sheet low-maintenance (no-wax) vinyl flooring to be used. Rubber flooring can be used, however the UBC project manager and design team to ensure the user group is made aware that maintenance of this flooring type will be customer-funded. Choice of flooring must reflect slip resistance required for the installation. Confirm with UBC Risk Management Services for any special requirements for laboratories using radioisotopes.

2.3 Floor Cleaning Requirements at Handover

1. Prior to commencing the floor care process, a detailed construction cleanup of the immediate surrounding area must be completed. 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.
2. If the project is a renovation, 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.

3. The floor surface must be vacuumed thoroughly to ensure all loose soil has been removed.
4. IMPORTANT: These floor cleaning procedures must be followed according to UBC's standards. Nothing less than this standard will be accepted or approved.

2.4 Design Requirements – Walls

.1 For protection of the lower 3' of walls in high traffic areas, chair rails, wall bumpers and corner guards are acceptable in coordination with user group requirements.
.2 Use cement board behind showers or bath tubs.
.3 Common Public Spaces:
  .1 It is recommended that interior colour selections for public space wall areas be neutral colours. This minimizes wastage and storage costs for different colours.Where wood finishes on walls require fire retardant, use only pressure-treated fire retardant, not surface-applied.

2.5 Design Requirements - Ceilings

.1 Ceiling finishes used should be easily accessible and should be such that they can be removed and replaced by service trades and Building Operations crews without damage and without requiring other trades or crews to provide access with special equipment. It should be noted that drop-down tiles with reveal edges are weaker than standard tiles.
.2 Equipment that requires regular servicing or maintenance (i.e. anything with filters such as fancoils) shall not be located above wood ceilings (or other integrated ceiling systems). For example - a vav box with reheat coil can be located above a wood slat ceiling provided that access panels are provided. However, fancoils, terminal heat pumps, etc. shall be located above acoustical tile ceilings or within exposed ceilings only.
.3 Coordinate the provision of access hatches during the design phase for wood ceilings and gypsum wall board ceilings.
.4 Concealed-spline ceilings are not acceptable.
.5 Fire-resistant ceilings that require the use of hold down clips must not be used.

2.6 Performance Requirements – General

.1 Seismic Restraint
  .1 Provide seismic restraint for suspended ceiling finishes and associated light fixtures. Refer to the UBC Resilience-based Design Guide for Nonstructural Components.
  .2 Coordinate structural attachment and seismic restraints for finishes with the specialty structural engineer. Provide signed and sealed shop drawings by a Professional Structural Engineer registered in the province of BC.

3.0 MATERIALS

.1 Refer to individual sections in Division 7.

4.0 LESSONS LEARNED AND COMMON MISSES ON UBC PROJECTS

Items in this section are lessons learned or misses from past projects. These may also include code or industry best practices. If not applicable to a project, a variance is not required.

.1 One major problem with wood ceilings is access for maintenance and repair due to panel size and weight. As the ceiling systems become more complicated, sometimes removing the ceiling is more work than the maintenance itself (especially if the work is just investigation/trouble shooting), especially when multiple BOps trades are required to remove the ceiling for any mechanical/electrical work above the ceiling. With approximate panel dimensions of 2' x 4' or 2' x 6', weight of these panel sizes also needs to be

considered for easy removal. It is strongly recommended to ensure access hatches are provided for and designed into the ceiling system.

.2 Another issue noted from past projects is the effect of temperature and humidity changes on wood wall and ceiling panels. Experience has shown that wood ceilings in particular are sensitive to temperature and humidity changes thereby leading to warping and shrinkage. This has caused serious safety issues with ceiling panels coming loose and falling. Extensive interior wood wall and ceiling finish installations should be reviewed and coordinated with the mechanical consultant.

*****END OF SECTION*****