



C-10 - Interior Design

General Notes

Furniture Procurement: All furniture purchases made on behalf of UNC should leverage UNC approved and State of NC contracted rates.

Materials Selection: In addition to meeting the necessary performance criteria, selection shall consider materials that require minimal maintenance, can accommodate future adaptation, can significantly reduce its environmental impact during its lifetime and have recycled content where appropriate for use. Sustainable materials are preferred in keeping with UNC's Sustainability Policies, however suitability, availability, cost effectiveness and adequate competition shall also be considered when selecting materials for use.

Designers and consultants should confirm the minimum performance characteristics of interior design elements and finishes for each application. Particularly in laboratory, medical, or athletic settings, there may be additional requirements that need to be met other than those noted below.

Code Compliance: Interior design elements must comply with current ADA standards as well as all other applicable codes and university requirements. It is the responsibility of the designer and consultants to seek clarification when needed and ensure these requirements are met.

Design Review: Design of public spaces for students and visitors must be reviewed by UNC Facilities Services Interior Design during the design process and prior to construction.

Asbestos & Lead Paint: Precautions should be taken to avoid interactions with asbestos and lead paint, which may be found in some University buildings. Due diligence to discover hazardous materials should be initiated at the commencement of all projects to ensure remediation prior to construction or installation of new finish materials.

Historic Objects: Various pieces of fine and decorative art are located in and around buildings on the UNC campus. These objects (including, but not limited to, paintings, sculpture, and antique furniture) are designated as "Historic Property" and must never be moved or altered without prior consultation with the Historic Collection Curator in the UNC Facilities Services group. The team planning and coordinating any design project should note the presence of historic objects early in the planning phase so that arrangements can be made for safe removal of the items.

Warranties: Manufacturers' specifications and installation guidelines must be followed to ensure valid warranty on all products.



C-10.1 – Interior Partitions

Non-load Bearing Partitions

Framing

Metal stud framing shall be consistent with design loads required for the use of the space, height of walls and the support of wall mounted items (including, but not limited to cabinets, shelving, TV monitors). Wood stud framing is not allowed.

The tops of walls shall be diagonally braced to the structure if they do not extend to the bottom of the structural deck.

Wall framing shall be braced with steel studs or wood blocking or 20-gauge sheet metal where wall mounted objects are located.

In renovation applications, metal studs that are damaged or that have lost structural integrity due to penetration by mechanical or electrical trades, shall be replaced.

Gypsum Board

Gypsum board shall be a minimum 5/8 inch thick for single layer applications in all typically occupied spaces. Water-resistant gypsum board (5/8 inch thick) shall be employed in high-moisture areas. Gypsum board shall be installed with a minimal number of joints. Provide moisture- and mold-resistant gypsum board on the interior side of exterior walls. Provide impact-rated gypsum board in high traffic areas such as corridors, lobbies, and fire stairs.

Plaster

Many of the walls on campus have a plaster finish. In renovation projects, it is preferred to patch plaster with a plaster material compatible with the existing material. When existing plaster ceilings are penetrated directly for mechanical or electrical work, the plaster shall be patched tightly in order to maintain the existing fire and acoustical protection. Repaired plaster walls and ceilings shall maintain the original fire-rating integrity.

Glazing

Glazing for interior partitions shall have a minimum thickness of one-fourth inch (1/4"). Glazing in interior partitions which are seven feet (7'-0") or less above the finished floor shall be tempered glass.

Sound Attenuation

Walls shall have sound insulation that is continuous from floor to top of wall.

The following chart illustrates minimum STC and NRC requirements for space types including classrooms and offices:

--- RESERVED FOR FUTURE STC CHART ---



Operable Partitions

Provide manual or electric operation folding panel partitions, as required to meet project requirements. Partitions shall be factory finished, supported from overhead track and include all hardware, seals, track and rollers as needed to close the specified opening. Partition finishes shall be Class A rated when tested in accordance with ASTM E84. Ensure structural coordination with UNC Facilities Architectural Design.

Demountable Partitions

Demountable and movable partitions shall be considered for use in areas susceptible to future partition rearrangement and substitution. Partitions shall be specified as non-progressive allowing the removal of individual panels from any location without disturbing adjoining units. Partitions are point accessible meaning instant access of panels allows for electrical, telephone and communication lines to be installed quickly and easily. Furniture support capability is optional.

Engineering Memorandum 10-2018 "Powered Modular Partition Walls and Powered Office Furnishings" provides UNC Facilities Services requirements for powered partitions.

Submit certification attesting that partition system has a Class A (under 25) Flame Spread Rating in conformance with ASTM E84.



C-10.2 – Furniture, Fixtures and Equipment (FF&E)

Provide interdisciplinary coordination and integrate all fixed and movable furnishings with the space design to interior finishes and all building systems (HVAC, Plumbing, Fire Protection, Communications, Electrical, Data, Architecture, A/V etc.). Outlets, data ports, switches, thermostats, A/V controls etc. must be fully accessible. Accommodate sprinkler heads, fire extinguishers, ADA, etc., clearances. Coordinate with the appropriate discipline and capture in plans and specifications all power, data, tele-comm, lighting, etc. required to support furniture, fixtures and equipment providing a fully functional space for the end user. Refer to UNC Electrical and Communications Guidelines for more information.

Performance Criteria

1. Casegoods

Standard office casegoods are laminate faced and edged.

When wood casegoods are approved for use by UNC Facility Services Interior Design, wood shall be FSC certified and exterior veneer shall be Grade A. This criteria shall also apply to section C-14.

2. Systems Furniture

Engineering Memorandum 10-2018 “Powered Modular Partition Walls and Powered Office Furnishings” provides UNC Facilities Services requirements for powered office systems furniture. Refer to UNC Electrical Guidelines for more information.

For panel-based systems, electrical components are pre-wired to a wiring harness, UL listed, a coordinated product of the systems furniture provided by the systems furniture manufacturer. The maximum for power wiring in conduit in UNC Buildings on campus is six conductors (3 hots, 1 from each phase, and 3 neutral) plus one equipment ground, sized #12 on a 20-amp breaker. UNC does not allow more conductors in a conduit, as this would require de-rating of the conductor’s ampacity in accordance with the National Electric Code. Preference for furniture manufacturers to provide wiring that matches UNC’s standard for power wiring – 3 hots, 3 neutrals and 1 equipment ground unless otherwise noted. A single circuit shall not serve more than 4 cubicles under any circumstances. Cables and electrical shall be routed from one panel to another by means of a lay-in installation in a continuous and unobstructed clearance.

3. Ergonomic Task Chair

Task chairs shall be a high-performance, long-use ergonomic chair that meets or exceeds all ANSI – BIFMA standards. When specifying, consider the following features:

- Fully adjustable arms
- Mesh back
- Pneumatic height adjustment
- Adjustable lumbar
- Separate seat and back
- Synchronized Tilt or 3-point pivot mechanism
- [Greenguard](#), SCS, or BIFMA FES certified
- Industry standard warranty or better on parts
- Weight limits above ANSI-BIFMA are occasionally required based on project specific needs.



4. Guest Seating

Bariatric seating shall be included in any waiting room or reception area. Consider seat width, arms/no arms when specifying seating.

5. Textiles

Wool textiles shall not be used. Seating textiles should be a minimum 50,000 double rubs with a soil resistant finish.

6. Fixed Tables and Seating

Design shall comply with the current versions of the North Carolina State Building Code and the Americans with Disabilities Act Accessibility Guidelines (ADAAG). <http://www.ada.gov/publicat.htm>. In classrooms and auditoriums where a tablet arm is provided for fixed seating, a fixed table or tablet arm on a pedestal shall be provided at all wheelchair seat locations.



C-10.3 – Interior Accessories

Window Treatments

1. Blinds

Specification or purchase of window blinds should comply with NCDOA: <https://ncadmin.nc.gov/870a> guidelines at a minimum.

The University standard for new construction and non-historic window coverings is 1-inch horizontal aluminum blinds, contract grade and warranty, equal to Levolor, Hunter Douglas or Bali. Color: white. Vertical blinds shall not be permitted.

Consider 2", 2.5" or faux/wooden/FR composite blinds for use in historic buildings on campus to maintain the exterior consistent visual aesthetic while meeting NFPA and life safety code requirements.

2. Curtains and Drapes

No draperies except for special circumstances and approved locations by UNC Facilities Services Interior Design. Textiles used shall comply with NFPA-701.

3. Roller Shades

Roller shades shall be contract grade roller shade with industry standard warranty. Shade cloth shall be selected from manufacturer's standard offering light-filtering cloth with an openness factor of 1 to 3 percent, anti-microbial 'No Growth' per ASTM G21, passes flammability requirements in accordance with NFPA 701 small and large-scale vertical burn. For motorized shades, electrical requirements NFPA Article 100 listed and labeled in accordance with UL 325 or other testing agency acceptable to authorities having jurisdiction, marked for intended use, and tested as a system. Individual testing of components is not acceptable in lieu of system testing.

Motorized shades must be coordinated with UNC Facilities Services, Electrical Engineering.

Classrooms/Conference: Shade cloth with 1% openness at classroom or conference spaces unless blackout material is required due to the specific nature of the room activities.



C-10.4 – Casework

Standards and tolerances for the quality and fit of Architectural Wood Casework and related interior finishes shall comply with the ANSI/AWI 0641 - Architectural Wood Casework Standard including wood veneer-faced architectural cabinets, plastic-laminate-clad architectural cabinets, and cabinet and drawer hardware as specified under CSI Master Format Division 6. Please Note: the “economy standard” as defined in ANSI/AWI 0641, subsection 3.4. Aesthetic, shall not be utilized for product unless specifically approved by the UNC Interior Design.

This standard establishes structural and aesthetic tolerances for each of the applications referenced above, ensuring that the final product is of the utmost quality with regards to visual appeal and structural integrity. Also refer to section **C-12** for **Performance Criteria**.

Casework should be reviewed with end users to ensure suitability to work performed in addition to review for ADA compliance.

Casework Installation

Casework installation should comply with AWI Installation Guidelines, Casework Wall Anchorage

Countertops

Specify solid surface countertops in high traffic areas. Where plastic laminate is used, specify image-match PVC edge.

Lab Casework

Countertops shall be smooth, clean exposed tops and edges in uniform plane, free of defects with minimum joints, flush with face of base cabinets (no overhang). The following notes apply:

1. **Phenolic resin shall be used at a minimum in lab spaces.**
2. **High pressure laminates with self-edges are not allowed.**
3. **Materials should be impervious to chemicals used.**
Design Team shall coordinate a list of known chemicals for the intended space with the Facilities Planning Project Manager and EHS during the design programming and planning phase.
4. **See Laboratory Design Guidelines for more information.**



C-10.5 – Interior Finishes

Specify manufacturer's standard offerings. In unique instances where a custom solution is designed because there is no standard offering, product and application must be reviewed and approved by UNC Facilities Services Interior Design.

Wall Coverings

Wallcoverings may only be used when additional acoustic, cleanability or impact resistance is required by project scope and other finish materials do not have appropriate performance characteristics for the application. Wallcovering must be approved for select use by UNC Facilities Services. Wallcovering with a mercury-, cadmium-, lead-, and chromium-free base shall be specified, and wallcoverings protected with bactericides and mildew inhibitors against microbiological and mildew growth.

Wall and Corner Protection

Rigid vinyl wallcovering or wall panel systems shall be considered where high-impact resistance wall surfaces are needed (i.e., classrooms, service corridors, loading dock areas, corridors and elevator lobbies with cart traffic, etc.). Resilient corner guards shall be used in high traffic areas. Stainless steel corner guards shall be used in high-abuse spaces and where forklifts are used (i.e., cleanrooms, warehouses, loading bay areas, etc.). Wall and corner protection shall comply with ASTM standards for fire, chemical, stain, fungal and bacterial resistance.

Interior Painting

Paints and coatings shall be VOC free

Interior paint sheen as follows:

- Gypsum Board - Walls: Flat, Eggshell or Satin
- Gypsum Board - Ceilings: Flat (typical), or Eggshell (wet locations)
- CMU: Semi-gloss
- Metal Doors and Frames: Semi-gloss

Tile

Tile selection and installation shall comply with the Tile Council of North America, Inc. (TCNA) Guidelines, ANSI Standards and local codes.

Floor tile shall be porcelain with thru-body color. Floor grout and grout applications in wet areas to be epoxy. White and light color grout shall not be used for floor applications.

Carpet

1. Carpet Tile

Specify carpet tile with a minimum 3.0 Heavy TARR rating. High traffic and heavy-use areas should be constructed with a type 6.6 nylon fiber. No fill pieces shall terminate in doorways. Solution dyed carpet fibers are preferred. Recyclable carpet is preferred.

Where carpet tile is the first type of flooring to approach from exterior entrances, walk off carpeting material shall be used and integrated into the existing carpet material for a minimum of 6 linear feet from entrance.

No carpet tile shall be specified on a floor below grade level unless it is a modular product that is not glued to the subfloor and can be easily removed and dried in a flooding event.



2. Broadloom Carpet

Broadloom carpet must be approved by UNC Facilities Services Interior Design and shall only be specified for specific applications (i.e. auditorium risers, area rug, etc.). Broadloom carpet is not permitted in most instances.

Resilient Wall Base and Transitions

Specify rubber base with field-cut wrapped inside/outside corners. Do not use preformed corners. New construction should use 4" cove base unless matching existing.

Resilient Flooring

1. Luxury Vinyl Tile (LVT)

LVT shall conform to ASTM F1700 Class III printed film with a minimum wear layer thickness 0.50 mm, however wear layer and product thickness shall be appropriate to space use, maintenance and foot traffic expected. Both Type A smooth and Type B embossed, with a factory protective finish that enhances cleanability and durability, can be specified.

2. Vinyl Composition Tile (VCT)

Vinyl composition tile must be approved for use by UNC Facilities Services Interior Design and UNC Facilities Maintenance and Construction. Due to high life cycle costs associated with long term stripping, buffing, waxing policies, there must be a valid performance justification for use of vinyl composition tile other than initial cost.

Specialty flooring such as anti-static or epoxy may be required depending on the application and should be confirmed with campus partners.

Raised Access Flooring Systems

Raised Access flooring systems, as a basis of design, shall consist of 24" square steel encapsulated wood core panels that are removable and interchangeable and provide easy access to the plenum area beneath the floor panels.

Raise the system above the sub floor to a height sufficient to allow wiring, bus duct, and adequate air flow to all air outlets. Provide for at least 33% growth. Support the under-structure system in such a way as to provide a floor that is rigid, level, and free of vibration.

The system shall have electrical continuity between the top of the floor panels and the base plates. The system shall have a Class 1-A fire rating when tested in accordance with ASTM-84-79.

The system shall have available accessories as follows: Cable cut outs with grommets, ramps, steps, handrails, fascia molding, plenum dividers, cove base, perforated air flow panels with adjustable air flow dampers and panel lifting devices.

Ceiling Finishes

Ceiling systems shall allow easy access to critical points of utilities: junction boxes, valves, exchangeable air filters, etc. Access doors to utilities shall be provided in gypsum ceilings and indicated in the construction documents. Confirm building standard acoustical ceiling tile prior to specification.



C-10.6 – Building Signage

The architectural construction documents shall incorporate the approved permanent room numbering / system utilized for all interior room identification signs. All University buildings are a “smoke free environment.” All entrances to buildings shall incorporate ‘No Smoking’ signage.

Interior signs which must be installed prior to Beneficial Occupancy include:

- Room Number Signs
- Toilet Room Signs
- Mechanical and Electrical Room signs.
- Stair and Elevator Signs
- Tactile Exit Signs

Note: Temporary signs are not acceptable.

As the signage program is developed consider fabricating the signage in-house. Consult the UNC sign shop for present in-stock standard signage systems/styles, and coordinate with the Project Manager for this determination. If signage is performed in-house, include line item in budget. Room numbering is a requirement of the fire alarm system and NFPA. It must be included as a life safety element.

Accessibility

The Designer is expected to provide a design that will comply with the current versions of the North Carolina State Building Code and the Americans with Disabilities Act Accessibility Guidelines (ADAAG).

<http://www.ada.gov/publicat.htm>. The University requires some elements that exceed these codes and standards: ***Interior and exterior signs identifying permanent rooms and spaces shall have both the name and number in raised letters and Braille that complies with the current accessibility codes.***

C-10.7 – Interior Electrical Products and Lighting

General

Products shall be UL listed and meet all applicable codes as well as UNC electrical requirements. Use of products containing proprietary electrical components is not permitted. [Connectrac](#) or similar products should be avoided in path-of-travel locations.

Halogen lamps are not permitted. Lamp color temperature to be coordinated with UNC Electrical Engineers and match buildings existing lamp color temperatures where applicable. LED lighting should be used where possible for energy efficiency. Refer to UNC Electrical Guidelines and *Engineering Memorandum 10-2018 “Powered Modular Partition Walls and Powered Office Furnishings”* for more information.

C-10.8 – Audio/Visual

Some campus partners will require A/V implementation as part of a project while others will not. The level of A/V coordination required should be confirmed during initial project phases to ensure scope is determined appropriately.