

**SECTION 2**  
**DIVISION 12**  
**FURNISHINGS**

## DIVISION 12 - FURNISHINGS

**Note: This is a guide for Designers only. Contents shall not be used in lieu of specifications as part of the Designer's contract documents.**

### SECTION 12 2113 – HORIZONTAL LOUVER BLINDS

#### PART 1 - PRODUCTS

##### 1.1 LOUVER BLINDS:

- A. If blinds are included in the project, they shall be of horizontal style and give a uniform appearance from the exterior. Vertical blinds shall be avoided.

### SECTION 12 6100 – FIXED AUDIENCE SEATING

#### PART 1 - GENERAL

##### 1.1 PROJECT CONDITION

Field Measurements: Coordinate actual dimensions of construction affecting fixed lecture room seating installation by accurate field measurements before fabrication. Show recorded measurements on final shop drawings. Coordinate field measurements and fabrication schedule with construction progress to avoid delay of Work.

##### 1.2 WARRANTY

- A. Manufacturer's Product Warranty: Submit manufacturer's standard warranty form for fixed lecture room chairs. This warranty is in addition to, and not a limitation of other rights Owner may have under Contract Documents.
  - 1. Warranty Period: One year from Date of Substantial Completion.
  - 2. Beneficiary: Issue warranty in legal name of project Owner.
  - 3. Warranty Acceptance: Owner is sole authority who will determine acceptance of warranty documents.

#### PART 2 - PRODUCTS

##### 2.1 MATERIALS

- A. Materials (Flammability) shall satisfy applicable test, codes, standards, or requirements as follows:
  - 1. Polyethylene shall meet the Federal Motor Vehicle Safety Standard No. 302 which specifies a burning rate of less than 4 inches per minute.
  - 2. Upholstery materials shall meet requirements as set forth in the state of California Bureau of Home Furnishings Technical Bulletin 117.
  - 3. Fire-performance Characteristics of Seat Padding: Provide seating that complies with test method: California Technical Bulletin 117.
  - 4. Cushioning and padding shall be self extinguishing as defined in the requirements as set forth in the State of California Bureau of Home Furnishings Technical Bulletin 117.

**University of North Carolina at Charlotte Design and Construction Manual**  
**Section 2, Division 12 – Furnishings**

2.2 SEATING

- A. Fixed classroom seating shall be designed with manufactured, integral horizontal beams for future installation of data transmission cables. Unless directed otherwise, each seat shall be provided with oversized folding tablet-arm writing surface for placement of laptop computers. Tablet-arm support arms shall be heavy duty.
- B. Approximately 8% of tablet-arm shall be configured for comfortable use by left-handed persons.

2.3 SEATING FABRICATION

- A. Chair standards (legs and sides) shall be constructed of heavy duty cast iron.
- B. Backs of chairs shall be curved. Seats shall be upholstered unless directed otherwise.
- C. Structural Performance:
  - 1. Engineer, fabricate and install fixed audience seating to the following structural loads without exceeding allowable design working stresses of materials involved, including anchors and connection. Apply each load to produce maximum stress in each respective component of each audience seat unit.
- D. Manufacturer's System Design Criteria:
  - 1. Table Tops:
  - 2. Shall be nominal 1-1/4" thick, warp-resistant construction.
  - 3. Shall have core construction of 1-1/8" thick Novoply of 45 pcf density. Top surface shall have .040" high pressure laminate meeting NEMA 1999 standards, the bottom surface shall have .020" thick backing sheet.
  - 4. Glue shall be PVA applied under hot press.
  - 5. Edges shall be extruded 1-1/4" vinyl bullnose with T groove, inserted into a routed groove and secured every 12".
- E. Modesty Panels:
  - 1. Shall be nominal .810" thick, warp-resistant construction.
  - 2. Shall have core construction of .75" thick Novoply of 45 pcf density. Top surface shall have .040" high pressure laminate meeting NEMA 1999 standards, the bottom surface shall have .020" thick backing sheet.
  - 3. Glue shall be PVA applied under hot press.
  - 4. Edges shall be extruded 7/8" vinyl bullnose with T groove, inserted into a routed groove and secured every 8 inches.
- F. Frames:
  - 1. Table and seating frames shall be constructed of 1-1/2" x 2" x 11 gauge welded tube, configured into an integral unit for support of table and seat swing arm mechanism.
  - 2. Table mounting plate shall be 6" x 8" x 11 gauge formed plate for securing to floor with 3/8" expansion anchors.
  - 3. Swing arms shall be constructed from 1-1/2" x 2" x 11 gauge welded tube, hinged at the cantilever frame with copolymer thermoplastic bearings at 8 gauge junction box with spring activated return fully enclosed to prevent injury.
- G. Seat Modules:
  - 1. A two piece injection molded thermoplastic seat and backrest. The seats and backrests shall be joined by a maintenance free steel hinge with integral spring mechanism. The hinge is to be covered with a high-strength plastic bellows. Attachment to steel frame shall be through four molded-in sills on bottom of seat.
  - 2. Upholstered seats and back pads are required.
  - 3. Provide removable or swing-away chairs where wheelchair spaces are required.
- H. Power Modules:

**University of North Carolina at Charlotte Design and Construction Manual**  
**Section 2, Division 12 – Furnishings**

1. Integral power modules shall be 6-1/4" long x 3" wide x 2-1/2" high. Module shall be constructed of polycarbonate with textured finish, meeting UL-VO minimum requirements.
2. Each power module shall have one duplex receptacle (110 volts) and two data ports for data connections to meet AT&T standard connections. Data connectors to be provided by owner. The power module shall have a positive locking device in open position. Shall be constructed for use with eight wire harness.
3. Eight Wire Harness shall be constructed from flexible conduit to distribute power between power/data modules and the power in-feed. The wire harness shall be enclosed in a plastic trough with a metal divider to separate power and communication or data cables. The trough shall be .06 inch thick rigid pvc and attached to underside of table surfaces.

**SECTION 12 9300 – SITE FURNISHINGS**

PART 1 - PRODUCTS

1.1 SEATING

- I. Campus Memorial Benches:
  1. Campus benches are acquired by donations through the University Development Office. Location of benches will be provided through the UPM by the guidance of the Development Office and coordinated with the Facilities Management Planning Section.
  2. Bench Material and Style: Campus benches will be made of wood and metal as made by DuMor model #67-470, or approved equal, with clear heart redwood or fair-weather Transit series model T-2 with clear heart redwood or ipe wood. Legs will be made of metal, painted black, and be a "Gull Wing" design. (see Annex F, attached herewith).
  3. Bench Location Considerations:
    - a. The location of the bench shall be placed to create a pleasant and comfortable environment.
    - b. Orient benches to face landscaped areas when possible.
    - c. Avoid facing benches toward streets and parking areas.
    - d. Locate benches to attract students.
    - e. Benches made of ipe wood will not be placed in areas in close proximity to benches made of redwood.
    - f. Benches will be located to bring honor to those for whom they were dedicated. When large numbers of benches are donated, careful consideration must be given to the location to ensure the selected area will not be inundated with unnecessary seating.

1.2 COLUMNS AND WALLS

- A. Refer to the Design Guideline Illustrations. Placement of new columns and walls shall be reviewed with the University Landscape Architect. Seat Walls – Use "Basic Square Rowlock" corner blocks.

1.3 1.3 BICYCLE

- A. Racks
- B. Lockers, Fiberglass bike lockers shall be provided with observation window.  
See Annex F, attached herewith.

**University of North Carolina at Charlotte Design and Construction Manual**  
**Section 2, Division 12 – Furnishings**

1.4 TRASH RECEPTACLES

- A. Provide exterior trash and recycling containers (consult UPM for appropriate number and orientation).
- B. See Annex/Appendix.
- C. [See Annex E – Selection and Placement of Recycling & Trash Containers on Campus.](#)

1.5 BOLLARDS

Pipe - Shall be 8" diameter, 36" high painted steel pipe set in 18" 3000 psi concrete.

1.6 SKATE STOPPERS

- A. Install skate board stopping.
- B. See Annex/Appendix.

1.7 ASH URNS

- A. Work with UPM to determine quantity and locations.
- B. See Annex/Appendix.

1.8 SIGNAGE

- A. See "CAMPUS SIGNAGE STANDARDS DOCUMENT".
- B. Signs, Roads Placement: (See Annex F, attached herewith).