120000. FURNISHINGS

120003. GENERAL PROVISIONS

.1 Refer to PART ONE, paragraph 00037, Fixtures, Furniture and Equipment (FF&E)

.2 DESIGNS: The Architect/Engineer (A/E) shall provide layouts of both Movable and Fixed Furnishings identified in the Program of Requirements (POR) to determine function and space usage for the project. Submittals are required as outlined in the A/E Agreement for Basic Services.

.3 CONSTRUCTION COORDINATION: The A/E is to coordinate all required power voice and data services leading to Fixed and Movable Furnishings locations on the Construction Drawings. Provide any details and drawings necessary for critical dimensions and locations of furnishings.

The A/E is to locate and coordinate all blocking, support and services for installation of all items in this Division.

121000. ART (deleted)

122000. WINDOW TREATMENTS

.1 DESIGNS: The A/E shall provide treatment to all windows applicable to the building design and functions. All windows treatment, interior and exterior, is integral to the energy management of the building, the control of light and comfort of the occupants. All proposed manufacturer products and hardware must be rated for extra heavy duty commercial use.

.2 APPROVALS: All product specifications, accessory items, colors, finishes, applications and details are to be reviewed and approved by the University Architect prior to the final development of the Construction Documents.

.3 CONSTRUCTION COORDINATION: The building design and Construction Documents must include all structural requirements, blocking, services and construction coordination for the installation of Window Treatment.
DIVISION 12 - FURNISHINGS

12 21 00. WINDOW BLINDS

.1 BUDGET ALLOCATIONS: Window Blinds shall be considered Fixed Equipment and are funded within the Construction Budget. In some cases, the University may choose to purchase Window Blinds for a project. In these cases, the cost of the equipment is moved from Construction funds to Equipment funds for purchase.

12 22 00. CURTAINS AND DRAPERIES

.1 BUDGET ALLOCATIONS: Curtain and Draperies shall be considered Movable Equipment and are acquired by the University utilizing a fund allocation within the total project funds but independent of the Construction budget.

12 23 00. INTERIOR SHUTTERS

.1 BUDGET ALLOCATIONS: Interior Shutters shall be considered Fixed Equipment and are funded within the Construction Budget.

12 24 00. WINDOW SHADES

.1 BUDGET ALLOCATIONS: Window Shades shall be considered Fixed Equipment and funded within the Construction Budget. In some cases, the University may choose to purchase Window Shades for a project. In these cases, the cost of the equipment is moved from Construction funds to Equipment funds for purchase.

.2 SHADECLOTH GUIDELINE APPLICATION: Shadecloth and other window coverings directly affect the HVAC efficiency and overall comfort of a space (brightness and glare). Some projects will require a minimum shading coefficient or solar factor by the mechanical engineer. Primary considerations for shadecloth application are:

- **SHADING COEFFICIENT** (percentage of solar heat through a combination of glass and specific shadecloth. Light colors have a lower shading coefficient and lower heat gain than dark colors).
- **SOLAR OPTICAL PROPERTIES** (used to calculate the shading coefficient with glass and shadecloth combination)
- **VISIBLE LIGHT TRANSMITTANCE (DAYLIGHT)**. Glare and brightness control is a primary consideration.
- **OPENNESS FACTOR (DENSITY)** of the shadecloth weave.
- **COLOR** of the shadecloth will directly affect the Shading Coefficient, brightness and glare. Light colors are more reflective with lower heat gain and shading coefficient but with higher percentage of daylight and solar transmittance. Light colors are brighter when sunlit which causes high surface brightness. Light colors are difficult to see through. Dark colors are viewable through the shadecloth to the outside. Dark colors absorb light and heat and are less energy efficient. Dark colors lower surface brightness and provides glare free environments. Medium value colors minimize excessive contrast in a room and reduces eye strain.

The OPENNESS FACTOR (OF) is a key element to consider once a shadecloth has met shading coefficient requirements.

OF at 0% – Privacy and room darkening (Opaque). Example - MechoShade ThermoVeil 0700 Series (Budget Vinyl) and MechoShade Midnight Blackout 0200 Series

OF at 1% - Privacy at night (Translucent shadecloth). Example - MechoShade ThermoVeil 0900 series
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OF at 2% - Visible Light Transmittance is 100%>80%. Example – MechoShade EuroTwill
6200 Series
OF at 3% - Visible Light Transmittance is 90%>60%. Example – MechoShade ThermoVeil
1500 Series and EuroTwill 6000 Series.
OF is 5% - Visible Light Transmittance is 50%>35%. Example – MechoShade ThermoVeil
1300 Series
OF is 8% - Visible Light Transmittance is 30%>22%.
OF is 15% - Visible Light Transmittance is 20% or less.

12 25 00. WINDOW TREATMENT OPERATING HARDWARE

.1 CONSTRUCTION COORDINATION: Necessary power, electrical controls and other devices
for installing window treatment shall be included in the Construction Documents.

12 30 00. CASEWORK

.1 DESIGNS: All product specifications, accessory items, colors, finishes, applications and
details are to be reviewed and approved by the University Architect prior to the final
development of the Construction Documents.

The A/E shall specify all utility fittings and fixtures for Casework equal to that specified for
the Plumbing, HVAC, Electrical and Data Communications.

.2 BUDGET ALLOCATIONS: Casework shall be considered Fixed Equipment and funded
within the Construction Budget.

12 40 00. FURNISHINGS AND ACCESSORIES

.1 DESIGNS: All product specifications, accessory items, colors, finishes, applications and
details are to be reviewed and approved by the University Architect prior to the final
development of the Contract Documents.

The A/E shall specify all utility fittings and fixtures for Furniture equal to that specified for
the Plumbing, HVAC, Electrical and Data Communications.

.2 BUDGET ALLOCATIONS: Furniture shall be considered Movable Equipment and acquired
by the University utilizing a fund allocation within the total project funds but independent of
the Construction budget.
DIVISION 12 - FURNISHINGS

.3 CONSTRUCTION COORDINATION: Necessary structural support, power, data, utilities and other support for Furnishings and Accessories shall be included in the Construction Documents.

12 48 00. RUGS AND MATS

.1 DESIGNS: All product specifications, accessory items, colors, finishes, applications and details are to be reviewed and approved by the University Architect prior to the final development of the Construction Documents.

12 48 13. ENTRANCE FLOOR MATS AND FRAMES

.1 DESIGNS: At entrance doors to buildings, entrance floor mats shall be in recessed frames wherever possible.

.2 BUDGET ALLOCATIONS: Recessed Entrance floor mats and frames shall be considered Fixed Equipment and funded within the Construction Budget.

12 48 53. RUGS

.1 BUDGET ALLOCATIONS: Loose rugs shall be considered Movable Equipment and acquired by the University utilizing a fund allocation within the total project funds but independent of the Construction Budget.

12 50 00. FURNITURE

.1 DESIGNS: All product specifications, accessory items, colors, finishes, applications and details are to be reviewed and approved by the University Architect prior to the final development of the Contract Documents.

The A/E shall specify all utility fittings and fixtures for Furniture equal to that specified for the Plumbing, HVAC, Electrical and Data Communications.

.2 BUDGET ALLOCATIONS: Furniture shall be considered Movable Equipment and acquired by the University utilizing a fund allocation within the total project funds but independent of the Construction budget.

.3 CONSTRUCTION COORDINATION: The A/E shall plan and include required structural support, power, data, utilities and other support for Furnishings and Accessories in the Construction Documents.

12 60 00. MULTIPLE SEATING

.1 DESIGNS: All product specifications, accessory items, colors, finishes, applications and details are to be reviewed and approved by the University Architect prior to the final development of the Construction Documents.

The A/E shall specify all utility fittings and fixtures for Furniture equal to that specified for the Plumbing, HVAC, Electrical and Data Communications.

In areas of assembly, the A/E shall show generic seating layouts, demonstrating seating volumes, aisle dimensions etc. as required for Schematic and Design Development Submittals. All seating layouts shall conform to current Ohio Building Code requirements.
DIVISION 12 - FURNISHINGS

.2 BUDGET ALLOCATIONS: Unless otherwise noted, Multiple Seating shall be considered Fixed Equipment and funded within the Construction Budget. In some cases, the University may choose to purchase Multiple Seating for a project. In these cases, the cost of the equipment is moved from Construction funds to Equipment funds for purchase.

.3 CONSTRUCTION COORDINATION: Necessary structural support, power, data, utilities and other support for Furnishings and Accessories shall be included in the Construction Documents.

Detailed shop drawings and field verification required from the Manufacturer prior to approval and installation.

12 61 00. FIXED AUDIENCE SEATING

.1 MATERIALS AND CONSTRUCTION: The A/E shall indicate complete specifications showing manufacturer, product number, materials and details from a selected product and at least two additional manufacturers, product numbers, materials and details showing equal compatibility.

The University has selected standard products for use. All proposals shall require approval of the University Architect prior to finalization of the Construction Documents.

.2 FOLDING TABLET ARMS: Unless otherwise noted by the University, all auditorium and lecture hall seating is required to have articulating one motion tablet arms.

Tablet construction to be laminated birch plywood core with finished birch or permanent/integral edges and laminated on both sides with plastic laminate. PVC "T" or self-edges are not acceptable. Tablet arms are to be full size without curves and indents that reduce useable work surface. The minimum tablet arm size is to be a rectangular shape 143 square inches or more with no cutouts within the rectangle. Ten to twelve percent (10-12%) of the tablet arms are to be left-handed. Left-handed seats shall be located to avoid interference with right-handed tablets. Provide clearance of 8" or more from top of seat to underside of tablet arm when open.

.3 SEAT AND BACK: Chair back and seat shall be two part (separate) construction. All components including upholstery shall be easily field replaceable. Provide gravity seat and articulating back. Provide minimum of 23" seat width on center and 18" seat depth. Provide minimum back height of 35" from seat. Upholstery fabric to be a minimum 200,000 double rubs composed of nylon or nylon blend.

.4 ARM CAPS/ARMRESTS: Arm caps and armrests shall be finished wood or molded polyurethane material. Plastic laminate and upholstered armrests are prohibited. Provide minimum arm rest width of 2".

.5 MOUNTING: Specify only beam or riser mounted applications to facilitate maintenance. Newly constructed facilities shall be planned accordingly.

.6 WARRANTIES AND GUARANTEE: Specify that the manufacturers guarantee the product and carry a minimum of 5 year complete warranty on all components. Throughout this five year period, the product will not show signs of excessive wear or deterioration or experience failure of any item material, construction or finish or the manufacturer shall promptly repair or replace equipment showing defects of material at no cost to the University.
12 93 00. SITE FURNISHINGS (Added 2/9/2007)

12 93 13. BICYCLE RACKS:
The following is the basis of design. Final A/E selections shall be reviewed by the University Landscape Architect for final approval.

.1 DuMor, Model: #83-00G galvanized loop, S-1 Embedment, 2-3/8” O.D. x 11-gauge wall galvanized steel tube as supplied by Service Supply, LTD. Columbus, OH, 614-861-3681.

12 93 23. TRASH RECEPTORS

.1 PLAZA STYLE TRASH RECEPTORS:
The following is the basis of design. Final A/E selections shall be reviewed by the University Landscape Architect for final approval.


12 93 43. SITE SEATING AND TABLES

.1 PLAZA STYLE BENCH:
The following is the basis of design. Final A/E selections shall be reviewed by the University Landscape Architect for final approval.

DuMor, inc. Model 93-60, 6 foot long metal bench, color: Black. Supplied by Service Supply LTD., Alan Kletecka, Columbus, OH, 614-861-3681.

.2 PLAZA STYLE PICNIC TABLE:
The following is the basis of design. Final A/E selections shall be reviewed by the University Landscape Architect for final approval.

Dumor #63-303-4 (or 3 for ADA accessible)/S-5 Picnic Table surface mount, Color: black. Supplied by Service Supply, LTD. Columbus, OH, 614-861-3681.

.3 PARK STYLE PICNIC TABLE:
Use only for repair / replacement after review with the University Landscape Architect.

Harvest Picnic Table, Model 2107X/RW, 84” x 233” x 30”(h) table with exposed aggregate finish and redwood bench assembly, as supplied by Aerocrete dba Architectural Precast 5660 Limaburg Road, Burlington, KY 41005-9398, 1-800-542-1738..

Concrete Pad, Model #9000, 8’ x 9’ x 4’ Concrete pad, as supplied by Aerocrete dba Architectural Precast 5660 Limaburg Road, Burlington, KY 41005-9398, 1-800-542-1738.