PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

A. This Section includes the following:
1. Wall mounted worksurfaces, tackboards and storage.
2. Panel mounted worksurfaces, tackboards and storage.
3. Wall attached bookcases.

B. Related Sections include the following:
1. Division 16 Sections for basic electrical and telecom design requirements

1.3 SUBMITTALS

A. Shop Drawings: Show layout and installation details for wall and panel mounted systems furniture. Include plans, details and attachments to walls, electrical and telecom point of connection, and keying schedule.

B. Samples for Verification: Samples for each type of finish, including worksurfaces and edge material, panel fabric, metal and wood storage finishes.

1.4 QUALITY ASSURANCE

A. Source Limitations: Obtain systems furniture through one source from a single manufacturer.

1.5 DELIVERY, STORAGE, AND HANDLING

A. Deliver systems furniture only after painting, flooring, ceiling installation utility rough-in, and similar operations that could damage, soil, or deteriorate systems furniture have been completed in all installation areas. If systems furniture must be stored in other than installation areas, store only in areas where environmental conditions meet requirements specified in "Project Conditions" Article.

B. Keep finished surfaces covered with polyethylene film or other protective covering during handling and installation.

1.6 PROJECT CONDITIONS

A. Environmental Limitations: Do not deliver or install systems furniture until building is enclosed, wet work is complete, and HVAC system is operating and maintaining temperature and relative humidity at occupancy levels during the remainder of the construction period.

B. Field Measurements: Verify field dimension systems furniture where electrical connection required. Verify all dimensions by field measurement before fabrication and indicate measurements on Shop Drawings.

1.7 WARRANTY

A. Special Warranty: Manufacturer's standard form in which manufacturer agrees to repair or replace components of systems furniture that fails in materials or workmanship within specified warranty period. Failures include, but are not limited to, the following:
   1. Delaminating of components or other failures of glue bond.
   2. Warping of components.
   3. Failure of structural integrity of the fixed bases, table tops, and accessories.
   4. Deterioration of finishes.

B. Warranty Period: Lifetime warranty.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Basis-of-Design Product: The design for systems furniture is based on Steelcase and Haworth products. Subject to compliance with requirements, provide the named product or a comparable product by one of the following:
   1. Systems Furniture:
      a. Steelcase Avenir or Haworth Unigroup in Type DEPT spaces
      b. Steelcase Answer or Kick Systems or Haworth Compose or Premise Systems in all other space types.
      c. Or approved equals

   2. All products to be Green Guard Certified, or certified as Indoor Advantage by Scientific Certification Systems.

2.2 DESIGN

A. SHOP DRAWINGS
   1. All layouts to be based on the standard configuration drawings appropriate to the space type. Standard configurations may require design modification due to column interference, thermostat locations and space shape. Standard configurations are as follows:
      a. Type STU – Student Station
      b. Type STF – Staff Station
      c. Type A – Administrative Office
      d. Type D – Director Office

   2. Wherever possible systems furniture to be wall track mounted.

   3. Provide shop drawings for the University approval. Drawings to include:
      a. Panel locations, dimensions and electrical base feed locations
      b. System furniture layouts including electrical, telecom outlet locations
      Verify field dimensions and make configuration modifications prior to submittal of shop drawings.

B. LAMINATE SYSTEMS FURNITURE (SPACE TYPES STU, STF, A)
   1. Panels:
      a. Frame: Metal, Standard Paint Color Finish, component parts from approved manufacturer lines as specified in PART 2-PRODUCTS 2.1A.1.a,b and c.

b. Fabric: Grade 1 Fabric inside and outside
c. Standard panel height 64 inches to 66 inches high depending on manufacturer
d. Electrical
    1) Specify the electrical load/capacity requirements for multiple station runs and coordinate with Design/Builder
    2) Provide (3) duplex outlets in panels for each workstation when standard wall outlet is not accessible.
    3) Base Feed: Provide base feeds as required to power panel supported individual and/or multiple work stations.
    4) Power options are 5 wire/3 circuit shared neutral or 8 wire/3 circuit no shared neutrals.
    5) All panels must be able to be field retrofitted for power.

e. Telecom:
    1) Provide for routing of telecom cables in base of panel. Standard is 1 voice and 2 data outlets per station. Coordinate installation of telecom cabling with Design/Builder.
    2) Panels must provide lay in cabling from panel to panel and raceways must have bottom and must be nominally 4" high.

2. Worksurfaces:
    a. Worksurfaces from approved manufacturer lines as specified in PART 2-PRODUCTS 2.1A.1.a,b and c.
    b. Thickness 1 3/16" : High Pressure Laminate Standard Finish
    c. Edge: 3mm Vinyl edge
    d. Provide intermediate worksurface cantilever brackets and/or leg supports as required by systems furniture manufacturer. Undersurface legs/supports not to protrude more than 16" into knee space.
    e. All Peninsula D tops to have post leg support
    f. All straight edge work surfaces wider than 30" to have scallop cut outs at back for cable management

3. Storage
    a. Storage components from approved manufacturer lines as specified in PART 2-PRODUCTS 2.1A.1.a,b and c.
    b. Metal Standard Finish
    c. Integral pulls and full extension ball bearing glides.
    d. All under surface BBF's and FF's to be full depth
    e. All storage to be finished on all sides
    f. All storage to be lockable; locks to be unique to and keyed alike in each office and workstation

4. Bookcases
    a. Bookcases from approved manufacturer lines as specified in PART 2-PRODUCTS 2.1A.1.a, b and c.
    b. Metal Standard Finish
    c. All bookcases to be (5) five shelf unless noted otherwise.
    d. All bookcases to be attached to wall with angle bracket. Alternate methods of attachment must be submitted for the University approval.

C. WOOD SYSTEMS FURNITURE (SPACE TYPES D)

1. Worksurfaces:
   a. Worksurfaces from approved manufacturer lines as specified in PART 2-PRODUCTS 2.1A.1.a, b and c.
   b. Thickness 1 3/16": Wood Veneer Finish
   c. Edge: 3mm Wood edge
   d. Provide intermediate worksurface cantilever brackets and/or leg supports as required by systems furniture manufacturer. Undersurface legs/supports not to protrude more than 16" into knee space.
   e. All Peninsula and D tops to have post leg support
      All straight edge work surfaces wider than 30" to have scallop cut out at back for cable management.

2. Storage
   a. Storage components from approved manufacturer lines as specified in PART 2-PRODUCTS 2.1A.1.a,b and c.
   b. Wood Standard Finish
   c. Handle pulls
   d. All under surface BBF's and FF's to be full depth
   e. All storage to be finished on all sides and
   f. All storage to be lockable; locks to be unique to and keyed alike in each office and workstation

3. Bookcases
   a. Bookcases from approved manufacturer lines as specified in PART 2-PRODUCTS 2.1A.1.a,b and c.
   b. All bookcases to be (5) five shelf
   c. Wood Standard Finish
   d. All bookcases to be attached to wall with angle bracket. Alternate methods of attachment must be submitted for the University approval.

PART 3 - EXECUTION

3.1 COORDINATION

A. Coordination with the University occupancy and Design/Builder's final clean schedule is required.

B. Coordination with Design/Builder on backing requirements, electrical and telecom point of connection is required.

3.2 INSTALLATION

A. Delivery, unloading and installation of all systems furniture to be included and performed per manufacturer's installation instructions.

B. A pre-installation meeting to review and coordinate with Design/Builder and the University is required.

C. A punchlist walk through with Design/Builder and the University is required. Submit a weekly update on outstanding punchlist items.

3.3 CLEANING AND PROTECTING

A. Repair or remove and replace defective work or materials as directed on completion of installation. Clean finished surfaces, touch up as required, and remove or refinish damaged or soiled areas to match original factory finish.

END OF SECTION