

## **Design and Construction Standards**

### **Division 12 Furnishings**

#### **General**

In general, follow the guidelines below when designing, specifying and installing accessories and specialty items, including display boards, signage, toilet room accessories, storage items, or other miscellaneous building components. Unless specifically indicated otherwise, these guidelines are not intended to restrict or replace professional judgment.

1. Finish Selections: All materials, colors, finishes, product specifications, applications and details are to be compiled and submitted by the Professional for approval of the Physical Plant Project Manager prior to the final development of the Construction Documents.
2. All materials shall meet or exceed the Building Code and University use requirements for the area.
3. In remodeled areas, repairs, or extension of existing furnishing systems, all material patches shall blend as close as possible. Work to existing corners, room edges, or clearly defined transitions.
4. LEED Policies: The University promotes energy efficient green design, construction and building operations. Whenever possible, materials are to be selected and specified following the United States Green Building Council LEED (Leadership in Energy and Environmental Design) Green Building Rating System® consensus-based national standard for developing high-performance, sustainable buildings. Refer to the website: <http://www.usgbc.org/>.
5. The Professional shall specify only finishes that require minimal maintenance and can be easily maintained by the University.

#### **Selection of Furnishings:**

This Standard has been developed in two parts: Requirements and Recommendations. All Requirements are as stated and must be followed for code, legal, policy or similar restrictive reasons. Recommendations are minimum standards generally adhered to for the selection and use of furnishings at Eastern Michigan University, and are intended to ensure a reasonable quality of product (proper function, adequate warranty, “green” building, quality materials, etc.).

Furnishings selected and/or procured directly by the end-user, without the support of the Physical Plant, must still comply with the Requirements, and are encouraged to comply with the Recommendations for Furnishings. Design Professionals shall be generally

required to meet the Recommendations as well, and document for review with the Physical Plant any deviations from these standards.

### **Finishes for all Furnishings:**

#### ***Requirements:***

1. All Furnishings:
  - a. Code compliance for Flame and Smoke Spread ratings per the current building and regulatory agency codes.
2. Furniture:
  - a. Color shall be manufacturers standard. Other colors may be used when approved by the Physical Plant. This shall be used for all:
    - i. Plastics, rubbers, vinyls, edge bands, and similar composite materials.
    - ii. Fabrics, upholstery, or similar woven materials
  - b. For metal components finishes shall be manufacturers standard:
    - i. Factory painted black
    - ii. Brushed aluminum (nickel or stainless)
    - iii. Chrome
  - c. For Plastic Laminate surfaces, finishes shall be manufacturer's standard grade laminate, neutral finish, with patterned finish.

#### ***Recommendations:***

1. Refer to specific furnishing descriptions in this standard for other Recommendations.

#### ***Other:***

1. Refer to the Architectural / Engineering Standards for Design and Construction Documents for information regarding room finishes. Intent is that furnishings and accessories are compatible in design, finish, and overall aesthetic with the surrounding space.
2. The Professional shall prepare both Furnishing Schedules, Finish Material Schedules, etc. and submit these for EMU approval prior to completion of the Construction Documents.
3. The Professional shall clearly note all finishes and their extent of coverage on the drawings and specifications using room finish schedules and include notations on elevations and details.
4. The Professional shall prepare a paint, stain, and coatings schedule listing all surfaces in generic terms, all coating or finish operations, the types of finish materials and the number of coats of each material. This schedule shall be included in the Specifications.

**Section 12 10 00 Art**

1. All artwork requires University review and approval. The Physical Plsnt shall be included in all submittals.

**Section 12 20 00 Window Treatments**

1. Window Treatments:
  - a. Shades, Blinds, and/or Fabrics (curtains, draperies, etc.) shall be manufacturer's standard light gray or light tan. Other colors may be used when approved by the Physical Plant.
2. Window Shade Systems
  - a. A. ASTM G 21 - Standard Practice for Determining Resistance of Synthetic Polymeric Materials to Fungi; 1996 (Reapproved 2002).
  - b. B. NFPA 70 - Fire Tests for Flame-Resistant Textiles; 2004.
3. Warranty
  - a. Roller shade hardware, chain and shade fabric: Manufacturer's standard non-depreciating twenty-five year limited warranty.
  - b. Roller Shade Installation: One year from date of Substantial Completion, not including scaffolding, lifts or other means to reach inaccessible areas
  - c. Store and handle shades to prevent damage to fabrics, finishes, and operators prior to installation.
4. Manufacturers
  - a. Hunter Douglas: [www.hunterdouglas.com](http://www.hunterdouglas.com).
  - b. SWF Contract: [www.swfcontract.com](http://www.swfcontract.com)
  - c. Owner accepted equal
5. Shade Systems
  - a. Shade System: Manual window shades, single and double shades
  - b. Fabric
    - i. Fabric: Double Shades and Solar Control Shades
      1. Double shade: Basketweave
      2. Single shade: Basketweave
6. Manually Operated Window Shade System Applications
  - a. Products:
    - i. All classrooms: Double Shade #10 Bracket System (horizontal) with Fascia. Description: manual operating interior, chain drive "double" solar and room darkening blackout roller shades, operating independently of each other, in all exterior windows of classrooms shown on drawings, and related mounting systems and accessories.
    - ii. All office areas: shade with fascia. Description: manual operating, chain drive, sunscreen roller shades in all exterior windows of all offices and office areas as shown on the drawings.
  - b. Chain Operation: Bi-directional wrap spring clutch shall allow for shade to stop and hold at any position.
  - c. Chain Operator Position: Right-hand side, unless otherwise noted on drawings.

- i. Bead Chain: No. 10 stainless steel.
- d. Clutch mechanism: Fabricated from high carbon steel.
  - i. Components fabricated from styrene based plastics, polyesters or reinforced polyester **are not acceptable.**
- e. Shade Components
  - i. Rollers:
    - 1. Shade roller tube shall be extruded aluminum of diameter and wall thickness required to support shade fabric. Maximum, allowable deflection  $L/700$ .
  - ii. Rollers shall be easy to remove from support brackets.
  - iii. Mounting Brackets: Stamped steel, custom fabricated as required for mounting style indicated.
  - iv. Hem bar: Concealed.
- f. Accessories
  - i. Finish for accessories, unless otherwise noted: Clear anodized aluminum
  - ii. Fascia: L-shaped extruded aluminum shall conceal mounting hardware, roller tube, and fabric rolled on tube.
  - iii. Pocket: Extruded aluminum shall conceal mounting hardware, roller tube, and fabric rolled on tube.
- g. Shade Fabrication
  - i. Shades mounted inside window frame: Window shade system shall completely fill opening from head to sill. Provide 1/4 inch clearance between each side of the shade and jamb, unless indicated otherwise.

### **Section 12 24 13 Roller Window Shades**

This Section includes roller shades with ceiling pockets Shade System: Manual window shades, single and double shades.

- 1. Shade System Applications:
  - a. All classrooms and rooms with audio/visual components require a double shade with fascia. This includes manual operating, chain drive “double” solar and room darkening blackout roller shades, in all exterior windows of rooms with related mounting systems.
  - b. All offices and areas that do not require double shades receive a single shade and fascia. This includes manual operating, chain drive, sunscreen roller shades in all exterior windows of offices and areas visible from the exterior.
  - c. Related Sections include the following: Division 06 Section “Miscellaneous Rough Carpentry” for wood blocking and grounds for mounting roller shades and accessories
- 2. Manufacturers
  - a. Basis-of-Design Product: SWF Contract
  - b. Subject to compliance with the below listed manufacturers:

- i. Draper Inc.
  - ii. Hunter Douglas, Inc.; Hunter Douglas Window Fashions Division
  - iii. Levolor; Levolor-Kirsch Window Fashions; a Newell Rubbermaid Company
  - iv. Lutron Shading Solutions by VIMCO
3. Shade Material: As indicated by EMU Physical Plant FPC
  - i. Material Openness Factor: 3 percent
  - ii. Bottom Hem: Straight.
  - iii. Fabric Width: As required to eliminate vertical seams.
4. Rollers: Electrogalvanized or epoxy primed steel or extruded-aluminum tube of diameter and wall thickness required to support and fit internal components of operating system and the weight and width of shade band material without sagging; designed to be easily removable from support brackets; with manufacturer's standard method for attaching shade material. Provide capacity for one roller shade band(s) per roller, unless otherwise indicated.
5. Direction of Roll: Regular, from back of roller.
6. Mounting Brackets: Fascia end caps, fabricated from steel finished to match fascia or head box.
7. Pocket-Style Head box: U-shaped, extruded aluminum with clear anodized finish, long edges returned or rolled; with a bottom cover consisting of slot opening of minimum dimension to allow lowering and raising of shade and a removable or an openable, continuous metal access panel concealing shade roller, brackets, and operating hardware and operators within.
8. Bottom Bar: Steel or extruded aluminum, with plastic or metal capped ends. Provide concealed, by pocket of shade material, internal-type bottom bar with concealed weight bar as required for smooth, properly balanced shade operation.
9. Audiovisual Light-Blocking Shades: Designed for eliminating all visible light gaps when shades are fully closed; fabricated from blackout shade band material with fascia and bottom bar extended and formed for light-tight joints among shade components and between shade components and adjacent construction.
  - a. Side Channels, Sill Channel or Angle, and Perimeter Seals: Manufacturer's standard design, including sill light seal attached to bottom bar, for eliminating light gaps when shades are closed.
  - b. Shade Band Retention System: Manufacturer's standard design for guiding shade band material through range of travel and holding shade band flat with edges of material within side channels.
10. Mounting: Recessed in ceiling pocket mounting permitting easy removal and replacement without damaging roller shade or adjacent surfaces and finishes.

11. Shade Operation: Manual; with continuous-loop bead-chain, clutch, and cord tensioner and bracket lift operator.
  - a. Position of Clutch Operator: Left side of roller, as determined by hand of user facing shade from inside, unless otherwise indicated.
  - b. Clutch: Capacity to lift size and weight of shade; sized to fit roller or provide adaptor.
  - c. Loop Length: Length required to make operation convenient from floor level.
  - d. Bead Chain: Stainless steel.
  - e. Operating Function: Stop and hold shade at any position in ascending or descending travel.
12. Finishes
  - a. Metal Finish: Class I, Clear anodic Finish: AA-M12C22A41 (Mechanical Finish: nonspecular as fabricated; Chemical Finish: etched, medium matte, Anodic Coating: Architectural Class I, clear coating 0.018 mm or thicker) complying with AAMA 611.
13. Colors of Metal and Plastic Components Exposed to View:
  - a. As selected from manufacturer's full range, unless otherwise indicated.
  - b. Proceed with installation only after unsatisfactory conditions have been corrected.
14. Roller Shade Installation
  - a. Install roller shades level, plumb, and aligned with adjacent units according to manufacturer's written instructions, and located so shade band is not closer than 2 inches (50 mm) to interior face of glass. Allow clearances for window operation hardware.
15. Adjusting
  - a. Adjust and balance roller shades to operate smoothly, easily, safely, and free from binding or malfunction throughout entire operational range.
16. Quality Assurance
  - a. Warranty
    - (i) Roller shade hardware, chain and shade fabric: Manufacturer's standard non-depreciating twenty-five year limited warranty.
    - (ii) Roller Shade Installation: One year from date of Substantial Completion, not including scaffolding, lifts or other means to reach inaccessible areas
    - (iii) Store and handle shades to prevent damage to fabrics, finishes, and operators prior to installation.

**Section 12 30 00 Casework**

1. Purpose:
  - a. The Project Manager shall incorporate the EMU specific requirements indicated in this standard's section into their design. The Project Manager shall further produce project specifications in line with industry standards that are updated to reflect these EMU standards.
2. General Requirements
  - a.

**Section 12 36 00 Countertops**

1. Under Construction

**Section 12 40 00 Furnishings and Accessories**

The EMU Faculties, Planning and Construction Department (FPC) and Purchasing will coordinate and execute all departmental requests for furniture purchases. The purpose of this policy is to streamline and improve the process for purchasing furniture, furnishings and accessories at all University departments and locations while meeting fire and safety codes. All furniture that is purchased using university funds is considered university property.

This standard hopes to overcome current communication gaps, increased cost, disruptive service, misuse of resources, failure to consider building codes, safety codes, infrastructure changes, size of space, power and network requirements, storage, removal, and surplus of furniture, and provide for vendor diversity.

Design goals/standard and overall concept shall be in accordance with the following EMU design philosophy:

1. Timeless appeal in style and color.
2. Appropriate selections for facility / user type.
3. Incorporate furnishings that meet ADA.
4. Durability, high performance finishes/materials:
  - a. Horizontal Surfaces – High Pressure Laminate, 3mm Edge Banding, Eased Edges, Solid Surface. Any variance needs to be approved by EMU Project Contact.
  - b. Vertical Surfaces – Low / High Pressure Laminate
  - c. Filing, Storage Units – Painted Metal Preferred, High Pressure Laminate Option.
  - d. Fabrics – Commercial Grade, Minimum 50,000 double rubs, High Performance Finishes, Vinyl, and Polyurethane. High-use areas may need higher double rubs and/or use of vinyl or polyurethane on seats and arms.
  - e. All materials to meet Life Safety Standards for flame spread and smoke development

5. Utilize well-established furniture manufacturers with good local representation.
6. Serviceability for products specified.
7. Selections shall coordinate with Interior Finishes and Architectural design intent of the building.
8. Current Manufacturer Building Standards:
  - a. Mark Jefferson Science Complex
    - i. Allsteel – desks, teardrop table, storage
    - ii. Steelcase – task chairs, white boards, side chairs
    - iii. Humanscale – task lights, keyboard trays, monitor arms
    - iv. Fixtures – classroom tables, technology carts
    - v. Herman Miller – classroom chairs
    - vi. Haworth/Steelcase – lounge furniture
    - vii. Lecture Hall Seating – American Seating
  - b. Pray-Harrold
    - i. Allsteel – desks, teardrop table, storage
    - ii. Steelcase – task chairs, white boards, side chairs
    - iii. Humanscale – task lights, keyboard trays, monitor arms
    - iv. Fixtures – classroom tables, technology carts
    - v. Herman Miller – classroom chairs
    - vi. Steelcase, Davis - Lounge
    - vii. KI - Lecture Hall Seating

Rackham -

Boone Hall – Knoll Equity, Haworth Seating

Marshall – Knoll Equity, Haworth Seating

Convocation Center – Kimball, Haworth

#### **Section 12 50 00 Furniture**

1. Furniture selection is dictated by Eastern Michigan University standards for classrooms and office spaces. Furniture is to be procured thru the contracts available at the EMU purchasing department. All final furniture selections are to be reviewed and approved by EMU Interiors Department prior to order placement. All furniture drawings shall be reviewed for code compliance prior to final specification.

#### **Section 12 51 00 Office Furniture**

- 1.

#### **Section 12 56 00 Institutional Furniture**

- 1.



**Section 12 58 00 Residential Furniture**

1. Best Hall
  - a. ULOFT – bed, dresser, desk, and chair
  - b. Integra –soft seating and occasional tables
2. Downing Hall
  - a. ULOFT – bed, dresser, desk and chair
3. Buell Hall
  - a. ULOFT – bed, dresser, desk and chair
4. Wise Hall
  - a. ULOFT – bed, dresser, desk and chair
  - b. High Tower - lobby
  - c. Peter Pepper - lobby
  - d. Leland – lounge
  - e. Allermuir – lounge
  - f. Bernhardt – lounge
  - g. Harper – lounge
  - h. Keilhauer – lounge
  - i. Steelcase – study area
5. Walton Hall
  - a. ULOFT – bed, dresser, desk and chair
  - b. Steelcase
  - c. Grand Rapids Chair - kitchenette
6. Putnam Hall
  - a. ULOFT – bed, dresser, desk and chair
  - b. Steelcase
  - c. Grand Rapids Chair - kitchenette
7. Phelps Hall
  - a. ULOFT – bed, dresser, desk and chair
  - b. Steelcase
  - c. Grand Rapids Chair - kitchenette
8. Sellers Hall
  - a. ULOFT – bed, dresser, desk and chair
  - b. Steelcase
  - c. Grand Rapids Chair - kitchenette
9. Hill Hall
  - a. New England Woodcraft – bed, dresser, desk and chair
  - b. Steelcase – study room
  - c. Sauder
10. Hoyt Hall
  - a. New England Woodcraft – bed, dresser desk and chair
  - b. Steelcase – study room
  - c. Sauder
11. Pittman Hall
  - a. New England Woodcraft – bed, dresser, desk and chair
  - b. Steelcase – study room

- c. Sauder
- 12. Brown Apartments
  - a. New England Woodcraft – bed, dresser
  - b. RT London – sofa, end table and ottoman
  - c. Grand Rapids Chair – dining table
  - d. Media Technologies – dining chair
- 13. Munson Apartments
  - a. New England Woodcraft – bed, dresser
  - b. RT London – sofa, end table and ottoman
  - c. Grand Rapids Chair – dining table
  - d. Media Technologies – dining chair
- 14. The Village
  - a. ULOFT – bed, dresser, desk and chair
  - b. Brill – bed, dresser, desk and chair
- 15. Cornell Apartments
  - a. New England Woodcraft – bed, dresser
  - b. RT London – sofa, end table and ottoman
  - c. Grand Rapids Chair – dining table
  - d. Media Technologies – dining chair
- 16. Westview Apartments
  - a. New England Woodcraft – bed, dresser
  - b. RT London – sofa, end table and ottoman
  - c. Grand Rapids Chair – dining table
  - d. Media Tecchnologies – dining chair

**Section 12 60 00 Multiple Seating**

- 1.

**Section 12 93 00 Site Furnishings**

- 1.

**End of Division 12 – Furnishings**