

**Jefferson County School District, R-1  
Support Services**

**TECHNICAL GUIDELINES**

**DIVISION 12 – FURNISHINGS**

**AUGUST 2022**

**Jefferson County School District, R-1 TECHNICAL GUIDELINES 2022**  
**Division 12 – Furnishings**

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DIVISION 12 - FURNISHINGS

**12 01 00 Furniture, Fixtures, and Equipment Moves and Relocations – August 2020**

- General:
  1. Work in this section is open to any product or material meeting the requirements of this Technical Guideline
  2. Coordinate this work with other scopes of work in the Project
  3. Coordinate with new Furniture, Fixtures, and Equipment as part of the overall scope of work
  4. This work may require phasing and temporary staging
- Mover pre-qualifications:
  1. Five (5) years' experience moving projects in commercial office, industrial trade, or education.
  2. Completed three (3) commercial moves, within the last five (5) years, of similar size and complexity
  3. Mover's Project Manager/Supervisor: Minimum of 10 years' experience in the same type of moves anticipated for the project.
- Pre-bid walk: Schedule a pre-bid walk to coordinate with pre-bid walks for other trades and contractors to define the scope of work and expectations.
- Pre-construction walk: Schedule a pre-construction walk prior to start of construction to confirm what has been identified to be moved and to coordinate staging areas.
  1. The District Project Manager will coordinate storage locations with the Contractor and School to determine the final location(s) that are most efficient for the project.
- Moving Equipment and Materials
  1. The General Contractor will hire and manage a moving company to move all loose furniture, fixtures, equipment, boxed items and similar items from the spaces to be remodeled to one or more designated storage locations as determined by the District Project Manager. Scope of work will also include returning these items to their original or other spaces following remodeling or other work.
  2. Boxes, packing tape, and labels will be provided by the District (unless otherwise requested) to the schools to pack items.
  3. Packing will be performed by each school with boxes and packing tape provided by the District.
  4. The District Project Manager will provide each school's staff information on proper packing and labeling.
  5. Schools are responsible for clearly labeling all boxes and items to be moved and, in coordination with the District Project Manager, provide designated storage locations adequate in size to store such items.
  6. If it is determined that such location(s) is/are not possible to provide inside the school, due to the construction activities, the General Contractor will be responsible to provide temporary storage container(s) to be placed on School Property in a

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- location designated by the District Project Manager for items to be stored during construction.
7. Mover will provide all trucks, moving equipment, building protection materials, and equipment, such as speed packs, required for moving large items.
    - a. Equipment requirements vary by project. Depending on the scope, movers are required to provide, but not limited to, the following:
      - (1) 4-wheel moving dollies
      - (2) Panel carts – for transportation of larger items
      - (3) Speed Packs
      - (4) Tools for any disassembly and reassembly, if necessary
      - (5) Straight trucks: with heavy-duty lift gate for transportation as needed.
      - (6) Clean moving pads
      - (7) Shrink-wrap as necessary/appropriate
      - (8) Aluminum mag ramps and/or steel plates, as needed, for loading and unloading at all locations
      - (9) Any other special moving equipment or materials that are necessary for a complete move.
  - **Schedule:** Coordinate with the construction schedule to remove items prior to construction work with enough time to allow for others to prep spaces for work and return items to their original location or other location within the building following construction.
  - **Scope of Work:**
    1. Depending on the complexity of the moves and relocations, a move schedule may be required. Coordinate scope of work with the District Project Manager.
  - **Building and Site Protection**
    1. The contractor will:
      - a. Prevent damage to all building structures involved in the move including, but not limited to all walls, floors, stairways, doorways, railings, and elevators.
      - b. Protect all elevators including but not limited to floors, walls, doors and door jams during moves.
      - c. Protect all hallway corners as needed.
      - d. Estimate and supply the correct amount and sizes of building protection materials. Those materials will be taken up and removed at the end of each phase of moving. If further building protection is needed, materials to do so will be provided and installed by the Contractor, kept in place while moving, and removed afterward.
      - e. Not block access to emergency ingress/egress points of building infrastructure hubs with staged and/or stored items. This includes, but is not limited to stairwells, elevators, main corridors, electrical closets, communications closets and mechanical rooms
  - **Damaged property**
    1. Confirmation of FF&E conditions: Prior to moves or relocations of any items, the General Contractor and Mover shall observe all items to be moved and/or relocated, and shall notify the District Project Manager immediately of any pre-existing damage to such items. General Contractor and Mover shall document all pre-existing damage to the building walls, floors, ceilings, doors and frames, etc., and shall notify the

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District Project Manager of such items.

2. Mover will be responsible for repairing or replacing any property damaged or lost during the moves.
  3. If there is any question about the structural integrity of an item, movers are responsible to provide a list of such items to the District Project Manager, prior to the move, in adequate time that these items can be reviewed and scheduled activities will not be impacted. The District Project Manager and school site Facility Manager will review this list with the Move Supervisor prior to the move and determine if items will be allowed to be moved, moved by the Facility Manager, or discarded. If items are allowed to be moved by the mover, it is understood that the mover is not responsible for damage of these items.
- Level 1 Moves and Relocations:
    1. Projects that will require minimal district support, such as full or partial carpeting projects. Comply with requirements listed above.
  - Level 2 Moves and Relocations:
    1. Projects with more complex requirements than Level 1. May include building additions, interior renovations that change locations of walls, introduce new programs, etc.
    2. The FF&E Project Manager may be involved to develop and confirm scope of work
    3. These additional requirements may be added to those listed above:
      - a. Written move schedule to include items to be relocated and final placement following construction. Coordinated with the construction schedule.
      - b. Other coordination as may be required because of scope of work.
  - Level 3 Moves and Relocations:
    1. This level will be coordinated through the FF&E Project Manager. Little if no scope of work required by the construction contractor.
    2. Moves and relocations to be coordinated with the construction schedules, including phasing and centralized locations or on-site storage of FF&E.
    3. FF&E Project Manager will coordinate with the District Project Manager and the General Contractor.
  - Execution:
    1. No move services or activities shall take place without oversight/supervision by the General Contractor and Move Supervisor.
    2. Move personnel shall be provided with the proper equipment and supplies to perform their moving activities in a professional manner to avoid damage to District property. Coordinate move activities at appropriate intervals and milestone to avoid conflict with other trades on site.

END SECTION 12 01 00

**12 21 00 Window Blinds – August 2021**

- Work in this section is open to any product or material meeting the requirements of this Technical Guideline.
- Applications

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1. Blinds are required at all exterior windows
  - a. Instructional areas
  - b. Administration areas
2. Window blinds are permitted at interior glazing
- Maintain minimum separation distance between window blinds and glazing in strict compliance with glazing manufacturer specifications.
- Submittals
  1. Product Data:
    - a. Required
  2. Samples:
    - a. Required
  3. Shop Drawing:
    - a. Required
  4. Closeout:
    - a. Submittals listed above
      - (1) Updated to record status.
      - (2) Samples excluded.
- Horizontal blinds:
  1. Preferred
  2. Manual operation only.
  3. Headrail:
    - a. U-shaped profile with rolled edges. 1" x 1" x .024" corrosion-resistant steel. Internally fit with components required for specific performance and designed for smooth, quiet, trouble-free operation. Baked-on polyester finish to match slats. Ends fitted with .024" steel end lock with adjustable tab for centering blinds.
  4. Tilting Mechanism:
    - a. Permanently lubricated die-cast worm and gear type tilter gear mechanism in fully enclosed housing with clutch action to protect ladder tapes from over rotation of the solid steel, corrosion resistant tilt rod.
  5. Tilt Control Wand: Tubular construction 9/32" diameter extruded clear acrylic hexagonal. Detachable without tools.
  6. Mounting Hardware:
    - a. Manufacturer's standard .040" steel box brackets with baked-on polyester finish to match headrail with additional support brackets for blinds over 60" wide.
  7. Slats:
    - a. 1" wide x .008" thick, heat-treated and spring tempered aluminum alloy 6011 with eased corners and smooth edges. Not less than 13.8 slats per foot to ensure tight closure and light control. Standard baked-on finish designed to inhibit dust build-up.
    - b. Reprocessed metal, vinyl and plastic slats are prohibited.
  8. Bottom rail:
    - a. Steel with corrosion-resistant baked-on polyester finish formed with double-lock seam into closed shape for optimal beam and torsional strength. Color-coordinated end caps.
    - b. Lifting Mechanism:

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- (1) Crashproof cordlock in housing with nickel-plate die-cast bearing surface and brass locking clips.
- 9. Slat Support:
  - a. Braided ladders of 100% polyester yarn color compatible with slats.
- Vertical blinds:
  - a. Prohibited

END SECTION 12 21 00

**12 22 00 Curtains and Drapes – October 2010**

- Prohibited

END SECTION 12 22 00

**12 23 00 Interior Shutters – October 2010**

- Prohibited

END SECTION 12 23 00

**12 24 00 Window Shades – August 2021**

- Exterior window applications only.
- Acceptable locations are limited to specific areas; in general, use is discouraged.
- PVC coated polyester material, manually operated.
- Openness factor: South facing 5%, other locations 14%.
- Manufacturers:
  1. Draper Shade & Screen Co.
  2. Hunter Douglas Window Fashions
  3. Levolor Contract
  4. MechoShade Systems, Inc.
- Warranty: 25 year manufacturer hardware, chain and shade cloth.
- Manual and Electronic Roller Shade System
  1. Acceptable Products: MechoSystems MechoShade or approved Equivalent
  2. Motorized semi-transparent fabric systems for sun control on large expanses of glazing.
  3. Use at exterior classroom windows and large expanses of glazing with approval of District Project Manager only

END SECTION 12 24 00

**12 31 00 Manufactured Metal Casework – August 2015**

- Not recommended

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- Only with approval of District Project Manager.

END SECTION 12 31 00

**12 32 00 Manufactured Wood Casework – October 2010**

- Work in this section is open to any product or material meeting the requirements of this Technical Guideline.
- In the absence of other information, standards of the following organizations apply:
  1. American Woodworking Institute (AWI)
- Submittals
  1. Product Catalog:
    - a. Required; with proposed items annotated
  2. Shop Drawing:
    - a. Required
  3. Samples:
    - a. Preferred
  4. Closeout:
    - a. Submittals listed above
      - (1) Updated to record status.
      - (2) Samples excluded
- Quality Assurance
  1. Manufactured Wood Casework is defined by the following characteristics:
    - a. Standard materials and modular assembly
    - b. Standard specifications and configurations
    - c. Multi-state product distribution
    - d. Ten consecutive year history of installations in K-12 public school buildings in the western USA;
    - e. Minimum 5000 lineal feet installed in Colorado.
    - f. Published and publicly distributed catalog documenting the above.
- Materials
  1. Particle (composition) board:
    - a. Monolithic high grade industrial western pine or fir
    - b. Minimum uniform density = 45 lbs. per cubic foot.
    - c. Body:  $\frac{3}{4}$  inch
    - d. Countertops and shelves:
      - (1) Spanning up to 36 inches:  $\frac{3}{4}$  inch thick
      - (2) Spanning 36 inches to 48 inches: 1 inch thick
      - (3)  $\frac{5}{8}$  inch elsewhere;
      - (4)  $\frac{1}{2}$  inch permitted when laminated to other structural materials.
    - e. Trim edges.
      - (1) Exposed unfinished edges are prohibited.
    - f. Exterior grade wood and phenolic resin composite panels treated with zinc borate are recommended for countertops containing lavatories or sinks.
  2. Hardboard:
    - a. Oil impregnated wood fiberboard, finished both sides.



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- b. Minimum thickness: ¼ inch
    - c. Restricted to concealed backs
  - 3. Plywood:
    - a. Exterior grade
  - 4. Exterior Plastic Laminate
    - a. High pressure decorative laminate
    - b. Low glare, fine textured finish
    - c. Countertop: 0.0420 inch
    - d. Other: 0.028 inch
  - 5. Interior Liner:
    - a. Neutral color 0.020-inch thick high-pressure laminate.
    - b. Thermally fused Melamine laminate
  - 6. Adhesives:
    - a. Laminate:
      - (1) Liquid polyvinyl acetate or urea resin bonded at 15-psi minimum.
    - b. Edge:
      - (1) Hot melt glue
    - c. Contact adhesives are prohibited.
  - 7. Solid Surface Product
    - a. Solid, non-porous, homogeneous surfacing material composed of acrylic resin and natural materials
      - (1) Acceptable Mfrs:
        - (a) Corian
        - (b) Wilsonart
        - (c) Formica
        - (d) Approved Equivalent
- Construction
  - 1. Modular components are required
  - 2. Joinery Options:
    - a. Eight or 10 mm fluted dowels + glue at 4 inch maximum spacing.
    - b. Rabbet/dado + glue
    - c. Screw attached friction-type connector
    - d. Screw:
      - (1) For attachment of accessories only
    - e. Staple:
      - (1) Not permitted
    - f. Nail:
      - (1) Not permitted
  - 3. Hinge:
    - a. 5 knuckle (hospital type)
    - b. 5 screw attachment to door; 4 screw attachment to body
    - c. One pair typical;
      - (1) 1 1/2 pair for doors over 35 inch height
    - d. 170 degree minimum door swing
    - e. Recessed/concealed (European) type hinges are not permitted
  - 4. Pull:

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- a. Recessed or semi-recessed screw-attached ABS
5. Catch:
  - a. Magnetic type at both top and bottom of each door leaf.
6. Drawer:
  - a. Rabbet, dovetail, or tongue and groove construction
    - (1) Butt joints are prohibited
  - b. PVC-clad hardboard is permitted for drawer bottom only.
7. Drawer Slide:
  - a. 100 pound minimum static load rating
  - b. Full extension roller bearing type is required for drawers deeper than 6 inches.
  - c. Bottom mounted track type is permitted elsewhere
  - d. Drawer Stops:
    - (1) Positive open and close stops are required.
8. Shelf:
  - a. Adjustable with 36 inch maximum unsupported free span
9. Shelf Hardware:
  - a. Standard:
    - (1) Pre-drilled holes or recessed adjustable track
  - b. Support:
    - (1) Self-locking 2-pin metal or nylon clip rated at 250 lbs. minimum;
    - (2) Adjustable without the use of tools
10. Locks:
  - a. Specific locations per Jefferson County School District, R-1 Educational Specifications
  - b. 5 pin tumbler cylinder lock.
  - c. Machined hole shape other than round to prevent lock rotation
  - d. Two keys per lock
  - e. Single key for each room or space, except where individual student compartments are provided.
11. Coat rod:
  - a. 1 inch minimum diameter chrome plated 14 gauge steel with minimum installed loading capacity = 10 lbs. per inch
12. Glass:
  - a. Prohibited in Manufactured Plastic Laminate Faced Casework.
13. Countertop:
  - a. Plastic Laminate
    - (1) Radius is required at external corners exposed to PK-5 student traffic
  - b. Optional: Solid Surface Product if approved by District Project Manager
14. Backsplash:
  - a. Required at all terminations to vertical building surfaces.
  - b. Four inch minimum height
15. Finish all surfaces
  - a. Exterior:
    - (1) High-pressure laminate
  - b. Interior:
    - (1) Liner
  - c. Concealed edges:

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(1) Sealer

16. Exposed edges:

- a. 3mm solid PVC radiused and buffed banding at countertop and drawer/door edge
- b. 1mm flat edge PVC banding at body, shelf, and elsewhere
- c. Self-edge barbed T-mold is not recommended
- d. Match edge is prohibited

17. Particleboard is prohibited within 3 vertical inches of finished floor.

18. Balanced construction of laminated panels is required.

- a. Unfinished particleboard surfaces, whether visible or concealed, are prohibited.
- Manufacturer-trained installers are required
  - Mounting: Mount base and overhead cabinets into wall studs or concealed blocking only.

END SECTION 12 32 00

**12 35 50 Educational / Library Casework – August 2015**

- Work in this section is restricted to specific manufacturers that have been previously approved by Jefferson County School District, R-1 Purchasing Department.

END SECTION 12 35 50

**12 35 53 Laboratory Casework – October 2010**

- Work in this section is open to any product or material meeting the requirements of this Technical Guideline
- Work in this section applies only to grade 9 – 12 Chemistry and Biology science facilities identified by the Jefferson County School District, R-1 Educational Specifications.
- For grades 1 – 12 Physics, General Science, and other curriculum, use Manufactured Wood Casework (Section 12 32 00).
- In the absence of other information, standards of the following organizations apply:
  1. American Woodworking Institute (AWI)
- Submittals
  1. Product Data:
    - a. Required
  2. Shop Drawing:
    - a. Required
  3. Samples:
    - a. Preferred
  4. Closeout:
    - a. Submittals listed above
      - (1) Updated to record status
      - (2) Samples excluded.
- Manufactured Metal Casework is prohibited for science applications.
- Materials
  1. Plywood:
    - a. Veneer core hardwood plywood with type II water-resistant glue.

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2. Face Veneers:
  - a. Kiln-dried red oak or white hard maple
3. Banding:
  - a. 3mm hardwood edge banding to match veneer door and drawer fronts
4. Adhesive:
  - a. Laminating glue
    - (1) Type II water-resistant
  - b. Assembly glue
  - c. Type III water resistant.
5. Glass:
  - a. 7/32 inch (6mm) for tall cases
  - b. 1/8 inch (3mm) for wall and upper cases.
- Construction
  1. Modular components are required.
  2. Joinery Options:
    - a. Eight or 10 mm fluted dowels + glue at 4" maximum spacing.
    - b. Rabbet/dado + glue
    - c. Screw attached friction-type connector
    - d. Screw:
      - (1) For attachment of accessories only
    - e. Staple:
      - (1) Not permitted
    - f. Nail:
      - (1) Not permitted
  3. Hinge
    - a. 5 knuckle (hospital type)
      - (1) 5 screw attachment to door
      - (2) 4 screw attachment to body
    - b. One pair typical
      - (1) 1 1/2 pair for doors over 35 inch height
    - c. 170 degree minimum door swing
    - d. Recessed/concealed (European) type hinges are not permitted
  4. Pull:
    - a. Recessed or semi-recessed screw-attached ABS
  5. Catch:
    - a. Magnetic type at both top and bottom of each door leaf.
  6. Drawer:
    - a. Rabbet, dovetail, or tongue and groove plywood box construction
      - (1) Butt joints are prohibited
    - b. PVC clad hardboard is permitted for drawer bottom only.
  7. Drawer Slide:
    - a. 100 pound minimum static load rating
    - b. Full extension roller bearing type is required for drawers deeper than 6 inches.
    - c. Bottom mounted track type is permitted elsewhere
    - d. Drawer Stops:
      - (1) Positive open and close stops are required.

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8. Shelf:
  - a. Adjustable
  - b. 36 inch maximum unsupported free span
9. Shelf Hardware:
  - a. Standard:
    - (1) Pre-drilled holes or recessed adjustable track
  - b. Support:
    - (1) Self-locking 2-pin metal or nylon clip rated at 250 lbs. minimum;
    - (2) Adjustable without the use of tools
10. Locks:
  - a. Most laboratory casework doors and drawers are to be lockable.
  - b. 5 pin tumbler cylinder lock.
  - c. Machined hole shape other than round to prevent lock rotation
  - d. Two keys per lock
11. Coat rod:
  - a. 1 inch minimum diameter chrome plated 14 gauge steel with minimum installed loading capacity = 10 lbs. per inch
12. Laminated construction is prohibited.
13. Chemical resistant joinery, fasteners, and hardware
- Countertops:
  1. Solid monolithic material
    - a. Epoxy resin with the following characteristics:
      - (1) Non-porous
      - (2) Resistant to all instructional laboratory chemicals including acetone and acetic acid
      - (3) Flame resistant
      - (4) Abrasion resistant
      - (5) Color: Black
      - (6) Twenty-five year service life without degradation of appearance.
  2. Acrylic polymer (Corian-type) product is prohibited for use in Science programs.
- Mounting: Mount base and overhead cabinets into wall studs or concealed blocking only.

END SECTION 12 35 53

**12 35 83 Musical Instrument Storage – August 2018**

- Musical Instrument Storage Casework
- Submittals:
  - Product data sheets
  - Installation instructions
  - Shop Drawings
  - Samples
  - O & M Data
  - Warranty
- Manufacturer's Qualifications:

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- Min. 5 years' experience in manufactured musical instrument storage products
- Coordinate concealed blocking supports in framed wall assemblies.
- Warranty:
  - Special Warranty: Manufacturer's written warranty indicating manufacturer's intent to repair or replace components of music education storage casework that fail in materials or workmanship within 10 years from date of Acceptance. Failures are defined to include, but are not limited to, the following:
    - Fracturing or breaking of casework components including doors, panels, shelves, or hardware resulting from normal wear and tear and normal use other than vandalism.
    - Delamination or other failures of glue bond of components.
    - Warping of casework components not resulting from leaks, flooding, or other uncontrolled moisture or humidity.
    - Failure of operating hardware.
- Acceptable Manufacturers:
  - Wenger Corp.
  - Approved Equivalent
- Materials:
  - Particleboard: ANSI A208.1, Min. 43 lb.cu. ft. density, composite product and adhesives. No urea formaldehyde added.
  - Fire rated particle board: ANSI A208.1, min. 45 lb/cu. Ft. density ASTM E-84 class 1.
  - Plywood: APA PS1-98 or ANSI/HPVA HP-1-2004 panel provide with HDF skins to prevent grain telegraphing
  - Particleboard Thermoset Panels: thermally infused polyester surfacing on both sides: NEMA LD 3 for VGS grade, edge banded.
    - Surface abrasion resistance: Tabor Wheel, 400 cycles for solid colors.
  - Polyethylene Shelves: High-density, one-piece, blow-molded or polyethylene, with radiused front edge. Same color throughout.
  - PVS Edge Banding: Radiused PVC extrusions, min. 1/8-in. thick.
- Music Instrument Storage Casework:
  - Modular instrument storage casework with integral bases, adjustable levelers, and through-bolted fastening
  - Open grille doors with electrostatic powder coating. Fully welded joints.
  - Adjustable shelf system integrated into cabinet walls allowing shelf placement at increments common to musical instruments. No loose parts or tools required. Shelf system to include a latch to prevent unintended shelf movement.
  - Through-venting design
  - Side Panels and Divider Panels: Particleboard thermoset panel with no urea formaldehyde added, 3/4 inch thick. Side panels machined to accept unit-to-unit through-bolting
  - Panel Doors; min. 3/4-in. thick, heavy duty hinges.
  - Slide Latch: 0.105 inch min. thickness steel, with padlock eye, powder-coat finish, through-bolted to panel door and side panel and welded to grille door frames. Latches securely without padlock. Provide with clear plastic label holder for use with standard size labels; number system available for user to print.

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- Panel Connectors: steel panel connectors with steel thread inserts, powder coated to match panels.

END OF SECTION 12 35 83

**12 48 00 Rugs and Mats – August 2015**

- Work in this section is restricted to specific manufacturers that have been previously approved by Jefferson County School District, R-1 Facilities Management.
- Coordination:
  1. Installation requirements at seams with other materials (e.g., carpet, tile)
- Locations for use:
  1. Vestibules
    - a. Required
  2. Corridors
    - a. At drinking fountains
      - (1) Permitted
  3. Classrooms
    - a. At casework with sinks
      - (1) Permitted
- Abrasive Action walk-off mat product
  - (1) Roll product preferred
  - (2) Tile product permitted
- Submittals
  1. Product Data:
    - a. Required
  2. Shop Drawing
    - a. Required
  3. Samples
    - a. Required
      - (1) Full range of manufacturers standard colors
  4. Closeout
    - a. Submittals listed above
      - (1) Updated to record status
        - (a) Samples excluded
  5. Operation and maintenance manual
- Execution Summary
  1. Installation:
    - a. Size:
      - (1) Full width and length of vestibules
        - (a) Total length equal to 12'-0" from exterior entry doors
      - (2) Strip two feet wide by full length of casework with sinks
      - (3) Square three feet by three feet at drinking fountains
    - b. Method
      - (1) Direct glue down
      - (2) Peel and stick

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END OF SECTION 12 48 00

**12 50 00 Furniture – August 2019**

- Work in this section is restricted to specific manufacturers that have been previously approved by Jefferson County School District, R-1 Purchasing Department.
- All furniture provided at all facilities shall meet the District's Furniture Standards
- Coordinate furniture layout and selection with the District Project Manager.

END SECTION 12 50 00

**12 59 00 Systems Furniture – August 2019**

- Work in this section is restricted to specific manufacturers that have been previously approved by Jefferson County School District, R-1 Purchasing Department.
- Coordination:
  1. With District Project Manager
  2. Utilities
    - a. Electrical
    - b. Communications
    - c. HVAC
- Manufacturers:
  1. Contact the District Project Manager for approved manufacturers
- Submittals
  1. Product Data:
    - a. Required
  2. Shop Drawing
    - a. Required
    - b. Include floor plan layouts and 3-D representations
  3. Samples
    - a. Required
      - (1) Plastic Laminate
      - (2) Metal
      - (3) Fabrics
      - (4) Other, as requested
  4. Closeout
    - a. Submittals listed above
      - (1) Updated to record status
        - (a) Samples excluded
      - (2) Operation and maintenance manual

END SECTION 12 59 00

**12 61 00 Fixed Audience Seating – October 2010**



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- Work in this section is open to any product or material meeting the requirements of this Technical Guideline.
- Submittals
  1. Product Data:
    - a. Required
  2. Shop Drawing:
    - a. Required
  3. Samples:
    - a. Preferred
  4. Closeout:
    - a. Submittals listed above
      - (1) Updated to record status
      - (2) Samples excluded.
    - b. Operation and Maintenance Manual for built-in work.
- Construction
  1. Floor mounted type
  2. Standards:
    - a. Heavy gauge rectangular profile tubular steel welded to mounting plate, seat, back and armrest.
  3. Seat:
    - a. One piece construction mechanically restrained from separating from standards.
    - b. Upholstered cushion
  4. Hinge:
    - a. Compensating type heavy-duty cast iron or steel
    - b. With noiseless self-rising mechanism
  5. Back:
    - a. Upholstered plastic
  6. Arm rest:
    - a. Steel, aluminum, solid wood or solid molded plastic.
    - b. Veneer or laminated construction is prohibited.
  7. Aisle lights:
    - a. UL listed with rectangular louvered metal faceplate.
    - b. LED Technology preferred

END SECTION 12 61 00

**12 63 00 Stadium and Arena Seating – October 2010**

- Work in this section is open to any product or material meeting the requirements of this Technical Guideline.
- Submittals
  1. Product Data:
    - a. Required
  2. Shop Drawing:
    - a. Required
  3. Samples:

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- a. Preferred
- 1. Closeout:
  - a. Submittals listed above
    - (1) Updated to record status.
    - (2) Samples excluded
  - b. Operation and Maintenance Manual for built-in work.
- Materials
  - 1. Wood seats are prohibited for exterior use.

END SECTION 12 63 00

**12 66 00 Telescoping Stands – August 2015**

- Work in this section is restricted to specific manufacturers that have been previously approved by Jefferson County School District, R-1 Facilities Management.
  - 1. Hussey Seating Co.
  - 2. Interkal
  - 3. Irwin Seating Co.
- Submittals
  - 1. Product Data:
    - a. Required
  - 2. Shop Drawing:
    - a. Required
  - 3. Samples:
    - a. Preferred
  - 4. Closeout:
    - a. Submittals listed above
      - (1) Updated to record status.
      - (2) Samples excluded.
    - b. Operation and Maintenance Manual for built-in work.
- Construction
  - 1. Seats
    - a. Continuous wood plank at existing repair or replacement only.
    - b. Plastic / vinyl seats at new work.
  - 2. Frame assembly:
    - a. Steel
  - 3. Wall mounted vertical flush front stack configuration is preferred.
    - a. Reverse folding configuration is permitted for special applications only.
  - 4. Row spacing:
    - a. 25 inches minimum
  - 5. Row Rise:
    - a. Installations of 6 rows or higher:
      - (1) 10” or 12” row rise is acceptable.
      - (2) Typical of Main Gymnasium installations
      - (3) Provide additional bracing to prevent deflection in closed position
    - b. Installations of 5 rows or lower:

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- (1) 10” row rise only.
- (2) Typical of Auxiliary Gymnasium installations
- (3) Provide additional bracing to prevent deflection in closed position
6. Capacity:
  - a. Assume 18 lineal inches per occupant
7. Motorized systems are required:
  - a. For installations of 10 rows or more
  - b. When unit Length (in feet) x number of Rows exceeds 250.
8. Motor Controller:
  - a. Hand-held controller units are preferred over fixed type.
  - b. Portable tractor-type motor units are not recommended
9. Comply with applicable codes and regulations for aisles, railings
  - a. Integral, folding “F” railings
10. In closed position, horizontal gaps between sections should not exceed 1/2 inch to deter unauthorized climbing.
11. Provide signs indicating no sitting or standing on bleachers in closed position
- Field Quality Control
  1. Confirm lateral load capacity of wall structure.
  2. Provide On-site operation/maintenance instruction by manufacturer's authorized personnel.

END SECTION 12 66 00

**12 93 00 Site Furnishings – August 2021**

- Bicycle Racks
  1. Rolling or Wave Rack
    - a. Min. 2-inch dia. Schedule 40 steel pipe, hot dipped galvanized
    - b. Welded connections
    - c. Surface flange for bolt mounting onto concrete surface, pad, or pier
    - d. Standard 36-inch high
  2. Grid Rack
    - a. Min. 1-5/8-inch O.D. Schedule 40 steel pipe, hot dipped galvanized for main structural components and min. ½-inch O.D. solid steel vertical rods.
    - b. Welded connections
    - c. Surface flange for bolt mounting onto concrete surface, pad, or pier
    - d. Standard 30-inch high
  3. Capacity: As required
- Benches, Picnic Tables, Trash Receptacles
  1. Mounting/Installation:
    - a. Must be permanently mounted with one of the following:
      - (1) Concrete pads/slabs-on-grade with anchor points
      - (2) In-ground mounting with concrete footings
  2. Surfaces at and Around Accessories:
    - a. Concrete, asphalt, or crusher fines
  3. Construction/Fabrication - General:

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- a. Steel Construction: Heavy gauge steel with fade-resistant powder coating finish
  - b. Aluminum Construction: Heavy gauge cast or extruded aluminum with fade-resistant powder coating finish
  - c. Welded or non-removable attachment points
  - d. Pre-drilled holes for surface anchoring
  - e. Stainless steel tamper-resistant and non-removable connections and anchoring
  - f. Powder coating finish – ASTM D3451 and AAMA 2604-05
  - g. Copolymer-based thermoplastic coatings acceptable with approval of District Project Manager
  - h. Benches:
    - (1) With or without back, with or without arm rests
    - (2) Heavy gauge slotted steel seats with powder coating finish
    - (3) Heavy duty steel frame
  - i. Picnic Tables:
    - (1) Bench seat or individual seats
    - (2) Heavy gauge slotted, expanded, or cut plate steel seats and top with powder coating finish
    - (3) Heavy duty steel frame
  - j. Trash Receptacles:
    - (1) Round or Square heavy gauge slotted steel enclosure designed for inserting a metal or plastic trash receptacle with cover.
    - (2) Powder coating finish
4. Acceptable if approved by the District Project Manager:
- a. Recycled Plastic - High Density Polyethylene (HDPE) with integral color pigment and formed texture
  - b. Stainless steel tamper-resistant and non-removable connections and anchoring
  - c. Benches:
    - (1) With or without back
    - (2) Steel reinforced seats and tops
    - (3) Heavy gauge steel frame and support with pre-drilled holes for surface anchoring
    - (4) Stainless steel tamper-resistant and non-removable connections and anchoring
    - (5) Powder coating finish on steel – ASTM D3451 and AAMA 2604-05
    - (6) Molded Plastic legs and supports are prohibited
  - d. Picnic Tables:
    - (1) Bench Seating
    - (2) HDPE bench and top with heavy gauge steel frame and support with pre-drilled holes for surface anchoring
    - (3) Stainless steel tamper-resistant and non-removable connections and anchoring
    - (4) Powder coating finish on steel – ASTM D3451 and AAMA 2604-05
    - (5) Molded Plastic legs and supports are prohibited
  - e. Trash Receptacles:
    - (1) Round or Square HDPE enclosure designed for inserting a metal or plastic trash receptacle with cover.
    - (2) Heavy gauge steel frame with pre-drilled holes for surface anchoring

END SECTION 12 93 00