

SECTION 12 32 16 –MANUFACTURED PLASTIC-LAMINATE-CLAD MUSIC CASEWORK

PART 1 GENERAL

1.1 ADMINISTRATIVE REQUIREMENTS

- A. **Pre-**Installation Conference:
1. Attendance: [Architect,] [Owner,] [Contractor,] [Construction Manager,] [Design/Builder] installer, and related trades.
 2. Review: Project conditions, manufacturer requirements, delivery, and storage, staging and sequencing, and protection of completed work.

1.2 SUBMITTALS

- A. Action Submittals:
1. Shop Drawings: Illustrate products, installation, and relationship to adjacent construction.
 2. Product Data: Manufacturer's descriptive data and product attributes.
 3. Samples:
 - a. [Selection samples.] [Verification samples.]
 - b. [Small scale base cabinet.]
- B. Closeout Submittals:
1. Operation and Maintenance Data.
- C. **Quality Control** Submittals:
1. Manufacturer qualification statement.
 2. Comprehensive quality assurance standard documentation.

1.3 QUALITY ASSURANCE

- A. Manufacturer Qualifications:
1. Manufacturer has a minimum of 10 years of experience of manufacturing architectural casework for similar projects, with a cataloged product line, and can show evidence of long-lasting financial stability.
 2. Certified for chain of custody by third party group approved by Forest Stewardship Council (FSC).
 3. Licensed under Architectural Woodwork Institute (AWI) Quality Certification Program (QCP).
- B. **Installer** Qualifications: Minimum [2] [] years' experience in work of this Section.
- C. **Mockups**:
1. Full-size [base cabinet] [wall cabinet] [[] cabinet] [shelf unit], and [].
 2. Countertop, minimum [4] [] feet long.
 3. Approved mockups [may] [may not] remain as part of the Work.

1.4 WARRANTIES

- A. Manufacturer's [1 year] [3 year] [5 year] [limited lifetime] warranty against defects in materials and workmanship, including non-casework accessories.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Contract Documents are based on products by Case Systems, Inc., www.casesystems.com.

B. Substitutions: [Refer to Division 01.] [Not permitted.]

2.2 MATERIALS

A. Panel Core: Particleboard, ANSI A208.1, Grade M-2 or higher.

**** OR ****

B. Panel Core: Moisture resistant particleboard, ANSI A208.1, interior grade moisture resistant, MR/FSC.

**** OR ****

C. Panel Core: Recycled content, FSC Certified particleboard, ANSI A208.1, ULEF/FSC, M-2, containing recycled content, no added urea formaldehyde.

**** OR ****

D. Panel Core: Recycled content, FSC Certified plywood, ULEF/FSC, no added urea formaldehyde.

**** OR ****

E. Panel Core: FSC Certified plywood.

F. Surfacing: NEMA LD-3 and ANSI A161.2.

1. Vertical surface decorative grade: VGS.
2. General purpose decorative grade: HGS.
3. Cabinet decorative liner grade: CLS.White in color.
4. Non-decorative backer grade: BKH.
5. Decorative thermally fused laminate. White in color.
6. Tango decorative thermally fused laminate.
7. Chemical resistant decorative laminate.

G. Edge Banding:

1. PVC, applied utilizing hot melt adhesive and radiused by automatic trimmer.
2. Adhesive: PVA type, mechanically applied, ULEF, free from VOC's.

2.3 FABRICATION

A. General Instrument Cabinet Body Construction:

1. All music instrument storage casework shall be assembled and finished at the factory. Field assembled casework will not be accepted.
 - a. Units too large to fit through a standard 36" doorway may be shipped knocked down and assembled in the field.
2. Joinery: Concealed interlocking fasteners or dowel construction at manufacturer's discretion. . Exposed assembly hardware and through-bolt construction methods for cabinet joinery will not be accepted.
3. Panels manufactured with balanced construction.
4. Structural components: 3/4 inch thick for tops, bottoms and ends of cabinets.
5. Fixed interior components: 3/4 inch thick for fixed shelves, dividers, and cubicle compartments.
6. Cabinet body exterior surfaces: [VGS.] [HGS.] [Decorative thermally fused.] [Tango decorative thermally fused.] [As indicated on Drawings.]
7. Cabinet body interior surfaces:
 - a. Closed cabinets: [VGS.] [HGS.] [CLS.] [BKH.] [Decorative thermally fused.] [Tango thermally fused.]

- b. Open cabinets: [VGS.] [HGS.] [CLS.] [BKH.] [Decorative thermally fused.] [Tango thermally fused.]
 - 8. Laminate grain direction: [Combination grain.] [Vertical grain.] [Vertical grain match.]
 - 9. Cabinet body front edge: [Nominally 1 mm thick PVC.] [Nominally 3 mm thick PVC.] [As indicated on Drawings.]
 - 10. Cabinet body mounting: 3/4 inch thick stretchers, concealed by cabinet back.
 - 11. Exposed laminate back panels: Finished 3/4 inch thick back panel when cabinet rear is exposed.
 - 12. Cabinet backs: 1/2 inch thick, surfaced both sides, fully captured on both sides and bottom.
 - 13. Stretchers:
 - a. 3/4 inch thick lower stretchers located behind back panel.
 - b. 3/4 inch thick intermediate stretchers located behind back panel.
 - 14. Adjustable shelf hole pattern: 5 mm diameter holes spaced 1-1/4 inches on center for mounting adjustable shelves, hardware mounting, and replacement and relocation of cabinet components.
 - 15. Intermediate shelves: Fixed.
- B. Base Cabinet Construction:
 - 1. Sub-top: Solid 3/4 inch thick sub-top.
- C. Tall Cabinet Top Edges: [Raw top edges.] [Nominally 1 mm thick PVC at top of end panels, stretchers and back.] [As indicated on Drawings.]
- D. Tall Cabinet Exterior Top Finish: [Match standard interior.] [CLS to match interior.] [HPL to match exterior.] [As indicated on Drawings.]
- E. Door Reveals:
 - 1. Between doors and drawers: 3 mm.
- F. Cabinet Toe Bases:
 - 1. Material: [Particleboard.] [MR/FSC particleboard.] [ULEF/FSC particleboard.] [ULEF/FSC plywood.] [FSC plywood.]
 - 2. Height: [96 mm.] [102 mm.] [152 mm.] [As indicated on Drawings.]
 - 3. Type: [Attached.] [3/4 inch loose strips.] [No base.]
- G. Music Cabinet Doors: [Solid Laminate Door] [Grille Door] [No Door]
- H. Solid Laminate Doors: Surfaced on both sides.
 - 1. Core: 3/4 inch thick core.
 - 2. Finishing: [HPL door and drawer front exterior with grade CLS on interior.] [HPL door interior and exterior; both sides match front surface color.] [As indicated on Drawings.]
 - 3. Surfaces: [HPL Grade VGS.] [HPL Grade HGS.] [Thermally fused.] [Decorative thermally fused.] [As indicated on Drawings.]
 - 4. Door front edges: [Nominally 1 mm thick PVC.] [Nominally 3 mm PVC.]
- I. Wire Grille Doors:
 - 1. Made heavy gauge metal rod welded and powder coated. Platinum finish.
 - 2. Hinges: 5-Knuckle Hinges / Reveal Overlay. Made of 0.095 inch thick steel with hospital tip. Institutional Grade 1 per ANSI/BHMA A156.9.
 - 3. Doors under 36 inches have two hinges. Doors 36 -72 inches have three hinges and doors over 72 inches have four hinges.
 - 4. Doors feature individual lock hasps and number plates. Doors where shown have individual stay close wire door latches. Combination/padlocks to be provided by others.
- J. Shelves:
 - 1. Adjustable shelves: Finished on both sides.

- a. Core material: [Particle board.] [MR/FSC particle board.] [ULEF/FSC particleboard.] [ULEF/FSC plywood.] [FSC Certified plywood.]
 - b. Thickness, in closed cabinets: [3/4 inch for shelves under [24] [27] [30] [33] [36] inches wide; 1 inch for shelved over [24] [27] [30] [33] [36] inches wide.] [1 inch.]
 - c. Thickness, in open cabinets: 1 inch thick, except for special use cabinets.
 - d. Edges in open cabinets: [Matching edges.] [Nominal 1 mm thick PVC] [Nominal 3 mm thick PVC] at front, [rear] [and] side] edges.
 - e. Edges in closed cabinets: [Matching edges.] [Nominal 1 mm thick PVC] [Nominal 3 mm thick PVC] at front, [rear] [and] side] edges.
 - f. Shelf surfaces in closed cabinets: [Match cabinet interior.] [Grade CLS on both sides.] [VGS HPL on both sides.] [HGS on both sides.]
 - g. Shelf surfaces in open cabinets: [Match cabinet interior.] [Grade CLS on both sides.] [VGS HPL on both sides.] [HGS on both sides.]
 - h. Setback for adjustable shelves: 15 mm from front.
2. Fixed shelves:
- a. Thickness:
 - b. All shelves: [3/4 inch thick except 1 inch at open shelves.] [1 inch.]
 - c. Shelves under [24] [27] [30] [33] [36] inches wide: 3/4 inch.
 - d. Shelves over [24] [27] [30] [33] [36] inches wide: 1 inch.
 - e. Shelf surfaces in closed cabinets: Match interior.
 - f. Shelf surfaces in open cabinets: Match interior.
- 3.
4. Instrument cabinet shelves:
- a. Core: [Particle board.] [MR/FSC particle board.] [ULEF/FSC particleboard.] [ULEF/FSC plywood.] [FSC Certified plywood.]
 - b. Heavy Duty Surface: [Thermoplastic white] [Thermoplastic gray] [Caseliner™ charcoal gray]
 - c. Medium Duty Surface: High Density Fiberboard 3/4 inch thick.
 - d. All instrument cabinet shelves to be permanently installed to cabinet. Removable shelves will not be accepted.
5. High-density fiberboard shelves: 1/4 inch thick.
- K. Mobile Cabinets:
- 1. Mobile backs: 1-inch-thick core.
 - 2. Maximum load rating: 500 pounds.
 - 3. Construction:
 - a. Core: 3/4 inch thick.
 - b. Core platform: 1 inch thick.
 - c. Edging for platform and mobile tops: 3 mm thick.
 - d. Mobile tops:
 - e. Overhang at front, sides and rear.
 - 4. Surface materials: [VGS laminate.] [HGS laminate.]
 - 5. Surface material color: [____.] [To be selected.]

2.4 ACCESSORIES

- A. Hardware:
- 1. Hinges: Five-knuckle type, reveal overlay, Institutional Grade per ANSI/BHMA A156.9; two per door except three per door for doors over 48 inches high.
- **** OR ****
- 2. Hinges: Concealed type, flush overlay, nickel plated, self-closing, minimum Grade 2 per ANSI/BHMA A156.9; two hinges for doors up to 48 inches high; three hinges for doors from 49 to 66 inches high; four hinges for doors 67 inches and higher.

3. Pulls: [Anodized aluminum wire type.] [Epoxy coated wire type.] [Brass core wire type.] [Stainless steel wire type.] [Semi-recessed type.] [Semi-recessed type, oversized.]
4. Drawer slides:
 - a. Standard drawers: Full-extension, side mount, 100 pound rated, minimum Grade 1 per ANSI/BHMA A156.9.
 - b. File drawers: Full extension, side mount, 100 pound rated, minimum Grade 1 per ASNI/BHMA A156.9.
- 5.
6. Coat hooks: Zinc plated.
7. Closet rods: Chrome plated oval rod, 15 x 30 mm.
8. Mirrors: 8 x 10 inches.
9. Label holders: [None.] [At drawers.] [At doors.] [At doors and drawers.] [As indicated on Drawings.]
10. Locks: Tall, Base, and Mobile:
 - a. Locations: [Drawers.] [Doors.] [As indicated on Drawings.]
 - b. Type: [Five-disc tumbler cam locks.] [Five pin lock, pin tumbler.] [Dead bolt style.] [Best - 5E.] [Olympus 100DR for doors and 200DW for drawers.]
 - c. Keying: [Key locks alike.] [Key locks differently by room and master key, minimum of 50 keying options.]
 - d. Lock cores: Removable, except at five pin locks.
11. Casters:
 - a. [Model M, 6 inch diameter.]
 - b. Bearings: Ball bearing, 360-degree swivel.
 - c. Wheels: Non-marring, [locking.] [non-locking.]
12. Catches:
 - a. Chain pulls: Zinc plated.
 - b. Chain stops: Zinc plated.
 - c. Elbow catches: Chrome plated.
 - d. Roller catches: Heavy-duty, spring-loaded.
 - e. Magnetic catches: White plastic housing.
 - f. Catch types:
 - 1) [Magnetic at base and wall cabinets, single roller at tall cabinets.]
 - 2) [Single roller at base, wall, and tall cabinets.]
 - 3) [Magnetic at base and wall cabinets, two rollers at tall cabinets.]
 - 4) [Single roller at base and wall cabinets, two rollers at tall cabinets.]
 - 5) None for concealed hinges at base, wall, and tall cabinets.
13. Tote trays: Impact resistant polystyrene with label holder, supported by polycarbonate rails.

PART 3 EXECUTION

3.1 INSTALLATION

- A. Install in accordance with manufacturer's instructions and approved Shop Drawings.

END OF SECTION