

## SECTION 065000 – CABINETS AND COUNTERTOPS

## PART 1 - GENERAL

## 1.1 SECTION REQUIREMENTS

- A. Quality Standard: Architectural Woodwork Institute's "Architectural Woodwork Quality Standards." or Woodwork Institute's "Manual of Millwork."
- B. Environmental Limitations: Do not deliver or install woodwork until building is enclosed, and HVAC system is operating.
- C. Comply with KCMS A161.1 Provide cabinets with KCMA's "B\Certified Cabinet" seal affixed in a semi-exposed location of each unit.
- D. Comply with KCMA A161.2 for plastic-laminate countertops.
- E. All kitchens shall be designed in manner to allow space for a 30" oven/range, microwave/hood combo, 24" built-in under cabinet dishwasher, and 22 cubic foot refrigerator.
- F. There shall be minimum 30" tall upper cabinets over all base cabinets in the kitchen.
- G. All full baths shall have cabinet base with cultured marble top with except cabinets over 48" which can be laminate with drop in sink.
- H. All countertops shall be at minimum plastic-laminate as described below.
- I. Clear wood finishes:  $\text{voc} \leq 350 \text{ f/L}$  for varnish &  $550 \text{ f/L}$  for lacquer.
- J. Shellacs:  $\text{voc} \leq 730 \text{ g/L}$  for clear &  $550 \text{ g/L}$  for pigmented.
- K. Stains:  $\text{voc} \leq 250 \text{ g/L}$ .
- L. Multi purpose Construction Adhesives:  $\text{voc} \leq 70 \text{ g/L}$ .
- M. See NSP Green Building Practices Handbook, Section 4.1 – Environmentally Preferable Products.

## 1.2 BASIS FOR REPLACEMENT

- 1. If all upper cabinets and base cabinets are not consistent in style and/or color the Contractor shall remove and replace in accordance with the specifications outlined below.
- 2. If all upper cabinets and base cabinets are matching and it is determined to be in reasonable condition for rehabilitation, but does not function as intended, the Contractor shall repair/replace all components in accordance with the specifications outlined below.

3. If the upper cabinets and base cabinets are damaged greater than 20% (i.e. cracking, splintering, warped, gouges, etc..) the Contractor shall remove and replace in accordance with the specifications outlined below.

## PART 2 - PRODUCTS

### 2.1 MATERIALS

- A. The doors are to be no less than 3/4" thick hardwood frames with plywood panels. All tops, bottoms, side panels, shelves and drawers shall be a minimum of 3/8" thick.
- B. Hardboard: AHA A135.4.
- C. Medium-Density Fiberboard: ANSI A208.2, Grade 130, made with binder containing no urea formaldehyde.
- D. Particleboard: ANSI A208.1, Grade M-2 or Straw-based particleboard complying with requirements of ANSI A208.1, Grade M-2, except for density.
- E. Softwood Plywood: DOC PS 1.
- F. Hardwood Plywood and Face Veneers: HPVA HP-1, made with adhesive containing no urea formaldehyde.
- G. Thermoset Decorative Panels: Comply with LMA SAT - 1.
- H. High-Pressure Decorative Laminate: NEMA LD 3.
- I. Solid-Surfacing Material: Homogeneous solid sheets of filled plastic resin complying with ISSFA-2.

### 2.2 CABINETS AND COUNTERTOPS

- A. Complete fabrication to maximum extent possible before shipment to Project site. Disassemble components only as necessary for shipment and installation. Where necessary for fitting at site, provide ample allowance for scribing, trimming, and fitting.
- B. Wood Cabinets for Transparent Finish:
1. Face Style: Raised Panel.
  2. Cabinet Style: Face Frame.
  3. Door and Drawer Fronts: Wood stiles and rails, with raised center panels.
  4. Door and Drawer Fronts: Veneer-faced plywood
  5. Face Frame Finish: Wood.
  6. Exposed Cabinet End Finish: Wood or Plastic Laminate
  7. Exposed Wood: Clear solid wood or hardwood plywood with Grade A faces per HPVA HP-1, selected for compatible color and grain as chosen by Developer.
  8. Door and Drawer Pulls: Surface mounted decorative pulls as chosen by Developer.
  9. Hinges: Concealed butt hinges.

10. Drawer Guides: Epoxy-coated-metal, self-closing drawer guides with nylon-tired, ball-bearing rollers.
  11. Matching of Veneer Leaves: Slip or Random match.
  12. Veneer Matching within Panel Face: Balance match.
  13. Semi-exposed Surfaces Other Than Drawer Bodies: as chosen by Developer.
  14. Drawer Sides and Backs: Solid-hardwood lumber, as chosen by Developer.
  15. Drawer Bottoms: Hardwood plywood as chosen by Developer.
- C. Plastic-Laminate Cabinets:
1. Exposed Plastic Laminate: NEMA LD 3, Grade VGS , through-color plastic laminate.
  2. Thermoformed-Vinyl-Faced Panels: Medium-density fiberboard, ANSI A208.2, with thermoformed vinyl overlay
  3. Construction Style: Face Frame.
  4. Door and Drawer Front Style: Raised center panels
  5. Door and Drawer Pulls: Surface mounted decorative pulls as chosen by Developer.
  6. Hinges: Concealed butt hinges.
  7. Drawer Guides: Epoxy-coated-metal, self-closing drawer guides with nylon-tired, ball-bearing rollers.
  8. Laminate Cladding: Horizontal surfaces other than tops, HGS; post-formed surfaces, HGP; vertical surfaces, as chosen by Developer.
  9. Drawer Sides and Backs: Solid hardwood as chosen by Developer. Drawer Bottoms: Hardwood plywood as chosen by Developer.
- D. Plastic-Laminate Countertops and Splashes:
1. Laminate Grade: NEMA LD 3 HGS for flat countertops, HGP for post-formed countertops.
  2. Substrate: Particleboard, ANSI A208.1, Grade M-2 or exterior plywood, PS 1, Grade C
  3. Backing: Plastic-laminate backer sheet, MENA LD3, Grade BKL
  4. Grain Direction: Parallel to cabinet fronts.
  5. Edge Treatment: Same as laminate cladding on horizontal surfaces.
  6. Splash Height: 4 inches
  7. Splash Thickness: 3/4-inch nominal thickness
  8. Splash Top-Edge Detail: Straight, slightly eased at corner
  9. Seams: Fabricate countertops without seams.
- E. Solid-Surfacing Material Countertops:
1. Solid-Surfacing Material Thickness: minimum 1/2 inch.
  2. Fabricate tops in one piece with shop-applied backsplashes and edges.
  3. Install integral sink bowls in countertops in shop.
  4. Comply with ISSFA-2 and ANSI Z124.3, Type 5 or Type 6, without a pre-coated finish.
- F. Countertop Configuration:
1. Front Style: No drip (raised marine edge with rolled front), Rolled, or Beveled 3/4-inch bullnose.
  2. Cove Type: Post formed laminate supported at junction of top and backsplash by wood-cove molding.
  3. Backsplash: Straight, slightly eased at corner
  4. End Splash: Matching backsplash.

## 2.3 SHOP FINISHING OF INTERIOR ARCHITECTURAL WOODWORK

- A. Finishes: Same grades as items to be finished.
- B. Finish architectural woodwork at the fabrication shop; defer only final touch up until after installation.
  - 1. Apply one coat of sealer or primer to concealed surfaces of woodwork.
  - 2. Apply a vinyl wash coat to woodwork made from closed-grain wood before staining and finishing.
  - 3. After staining, if any, apply paste wood filler to open-grain woods and wipe off excess. Tint filler to match stained wood.
- C. Transparent Finish: AWI finish system synthetic penetrating oil, conversion varnish or catalyzed polyurethane.
- D. Transparent Finish: WI finish System 4, conversion varnish or 5, catalyzed polyurethane or 6, penetrating oil.

## PART 3 - EXECUTION

### 3.1 INSTALLATION

- A. **All cabinets shall be anchored with screws to wall framing (NAILING IS NOT ACCEPTABLE). If wall framing is not available the Contractor shall install the necessary blocking and repair the drywall as needed.**
- B. Install cabinets with no variations in flushness of adjoining surfaces by using concealed shims. Where casework abuts other finished work, scribe and cut for accurate fit. Provide filler strips, scribe strips, and moldings in finish to match casework face.
- C. Install cabinets without distortion so doors and drawers fit openings properly and are aligned.
- D. Install level and plumb to a tolerance of 1/8 inch in 8 feet.
- E. Fasten each cabinet to adjacent unit and to structural members of wall construction. Fasten wall cabinets through back, near top and bottom, at ends and not less than 24 inches o.c.
  - 1. Use No. 10 wafer-head screws sized for 1-inch penetration into wood framing, blocking, or hanging strips.
  - 2. Use toggle bolts through metal backing behind gypsum board.
- F. Fasten plastic-laminate countertops by screwing through corner blocks in base units into underside of countertop. Spline and glue joints in countertops and use concealed mechanical clamps.
  - 1. Provide cutouts for sinks and lavatories, including holes for faucets and accessories.
  - 2. Seal edges of cutouts by saturating with varnish.

- G. Fasten solid-surface countertops by screwing through corner blocks in base units into underside of countertop. Align adjacent surfaces. Form seams 1/8 inch wide and adhere with manufacturer's recommended joint adhesive in color to match countertop. Dress joints smooth, remove surface scratches, and clean entire surface.
  - 1. Seal edges of cutouts by saturating with varnish.
- H. Cabinets: Install so doors and drawers are accurately aligned. Adjust hardware to center doors and drawers in openings and to provide unencumbered operation.
  - 1. Fasten wall cabinets through back, near top and bottom, at ends and not more than 16 inches o.c. with No. 10 wafer-head screws sized for 1-inch penetration into wood framing, blocking, or hanging strips.
- I. Anchor countertops securely to base units. Seal space between backsplash and wall.

END OF SECTION 065000