

SECTION 12320
MANUFACTURED CASEWORK

PART 1 - GENERAL

1.1 SUMMARY

- .1 Provide kitchen and vanity cabinets as indicated, specified, and scheduled.
- .2 Provide counters and cabinets for Lunch and Washrooms, as indicated.

1.2 RELATED SECTIONS

- .1 06200 Finish Carpentry.
- .2 07900 Joint Sealers.
- .3 11450 Residential Appliances.

1.3 REFERENCES

- .1 ANSI/BHMA A156.9-03 Cabinet Hardware
- .2 ANSI 208.1- 1999 Particleboard.
- .3 ANSI 208.2-2002 Medium Density Fiberboard (MDF) for Interior Applications.
- .4 German standard DIN 68861 1B for stain resistance.

1.4 SUBMITTALS

- .1 Submit in accordance with Division 1 Submittal Procedures.
- .2 Product Data: For cabinets and cabinet hardware.
- .3 Shop Drawings: Include plans and elevations. Show materials, finishes, filler panels, hardware, countertop edge and backsplash profiles, locations of service outlets, typical and special installation conditions, the material being supplied and connections, attachments, anchorage and location of exposed fastenings, as applicable, cutouts for plumbing fixtures, and methods of joining countertops.
 - .1 Appliances: Coordinate shop drawings with final selection of appliances.
 - .2 Cabinets: Verify dimensions of installation areas by field measurements before fabrication and indicate measurements on Shop Drawings. Show fillers and scribes if necessary.
 - .3 Countertops: Verify dimensions of countertops by field measurements after base cabinets are installed but before countertop fabrication is complete.
- .4 Samples: For each exposed finish.

1.5 QUALITY ASSURANCE

- .1 Mock-up:
 - .1 Mock-up pre-manufactured casework for one entire unit complete with hardware, accessories plumbing and electrical devices, and sealants.
 - .2 Upon approval of Consultant, mock-up may be incorporated into the finished work if totally undamaged at date of Substantial Completion.
- .2 Warranty: In addition to manufacturer's standard one (1) year warranty, provide a five (5) year warranty on delamination of finishes and two (2) year warranty on hardware.

PART 2 - PRODUCTS

2.1 MATERIALS

- .1 Use clean stock only and comply with QSI Manual.
- .2 Moisture Content: Lumber shall be dried to an average moisture content of 10%. Moisture equilibrium of finished products shall not be subjected to excessive changes.

- .3 Plywood: Formaldehyde-free veneer, five (%) plies for 19mm (3/4") thickness; core material for plywood used with plastic laminate finish, either;
 - .1 Poplar/Spruce-faced plywood to CSA 0153, "B" face free of voids, or
 - .2 Birch plywood to CSA 0115, Sound Grade or better with sanded faces without defects.
- .4 MDF (Medium Density Fibreboard): Minimum density 769 kg/m³ (48 lb/cu. ft.) conforming to ANSI A208.2, generally 19mm thickness. MDF shall be formaldehyde-free.
- .5 Melamine: Low pressure laminate, thermally fused to particleboard substrate, meets or exceeds NEMA Standard LQ1.
- .6 Particleboard and fibre board shall not be used as a core material for any work of this section.
- .7 Plastic Laminate: High-Pressure Laminate;
 - .1 Horizontal Grade: 1.06mm (.042") to 1.27mm (.050") thick.
 - .2 Vertical Grade: 0.76mm (.030") thick.
 - .3 Liner Grade: 0.035mm thick.
 - .4 Melamine (Post Formed): Low pressure laminate conforming to CAN 3.A172 and NELLA LD3 1991.
 - .5 Acceptable Manufacturers: Armstrong, Nevamar, Wilsonart.
 - .6 Colour: Consultant to select. The Contractor may propose an alternate manufacturer and matching colour from the list of acceptable manufacturers listed, provided that samples and colours are submitted to the Consultant for approval. If the Consultant does not approve the proposed alternative, the product specified in schedules shall be provided at no additional cost to the Contract.
- .8 Hardboard: Manufactured and graded in accordance with CAN/CGSB 11.3-M87, Type 2 tempered.
 - .1 Backing Sheets: By same manufacturer as facing sheets, to manufacturer's standard, thickness to suit exposed surface laminate grade in accordance with QSI.
 - .2 Adhesives: Comply with QSI standards, and as recommended by materials manufacturers.
 - .3 Hardwood Plywood: Manufactured and graded in accordance with CSA 0115. Veneer core. MDF and particle board core is not permitted where plywood is indicated.

2.2 MODULAR UNITS

- .1 Cabinet and vanity units: Manufacturer's standard modular units comprising base cabinets, wall cabinets, to layout as indicated on the drawings.
- .2 Style: European style with white, square raised panel Thermo Foil doors.
- .3 Upper Cabinets: Standard full height doors, 762 mm (30") high.
- .4 Base Cabinets: Drawers and swing out doors to arrangement as shown on the drawings. Sink cabinet to have two fixed panels across top. Provide a minimum of four sliding drawers.
- .5 Doors and Drawers:
 - .1 Melamine impregnated low pressure laminate surface on high density particleboard core with PVC edge banding.
 - .2 Doors fronts to be white, square raised panel Thermo Foil.
 - .3 Fix drawer front to drawer body with mechanical fastenings.
 - .4 Acceptable products: Nevemar, Arborite, Wilsonart or approved alternative.
- .6 Pulls/Handles: 102 mm (4") satin stainless, D pulls.

2.3 CABINET CASE CONSTRUCTION

- .1 Cabinets: Fully laminated high density particleboard cases, with interior and exterior of gables, both sides of shelves and upper cabinet bottoms covered with melamine.
 - .2 Backs: 3 mm (1/8") hardboard painted, finished to match inside of cabinet.
 - .3 Upper cabinet top and lower cabinet bottom: High density particle board, interior finish melamine.
 - .4 Cabinets over 813 mm (2'-8") wide shall have mullion installed adding a fifth support for the adjustable shelves.
 - .5 Front edges of gables and shelves: PVC edge banded, colours: shelves white, gables maple.
 - .6 Toe space at base cabinets: see drawings
 - .7 Cabinets: Assembled with dowels and bolts.
 - .8 Cabinet Hanging Rails: High-density particle board, concealed.
 - .9 Drawer Construction: Sides, backs, and subfronts high density particle board finished with melamine.
 - .1 Bottom: 3 mm (1/8") hardboard, paint finished.
 - .2 Finish exposed edges of drawers with plastic edging.
 - .3 Drawer Slides: Drawers with metal slides on tandem runners with safety stops to prevent tipping, minimum 40 kg (88 lb) capacity, finished in white epoxy.
 - .10 Door Bumpers: Provide plastic door bumpers for sound absorption.
 - .11 Screw Caps: Provide colour coded screw caps over screw heads exposed to view.
- 2.4 COUNTER TOPS**
- .1 Plastic Laminate: American National Standards Institute/National Electrical Manufacturer's Association (ANSI/NEMA), LD 3-1995, High Pressure Decorative Laminate, Type HGS, 1 mm (0.040") thick.
 - .2 Counter tops: One-piece factory postformed type with bullnosed edges and 102 mm (4") high backsplash, composed of high pressure laminate bonded to exterior grade plywood core.
 - .3 Kitchen counter top: 648 mm (25-1/2") wide. Vanity tops: 572 mm (22-1/2") wide.
 - .4 Provide cut-outs in tops for sinks and plumbing fixtures to templates supplied by plumbing subcontractor at the time of installation.
 - .5 Filler Panels: Provide filler panels, back panels and scribe moulding for a complete and finished installation.
- 2.5 ACCESSORIES**
- .1 Sealant: Provide sealant as specified in Section 07900 Joint Sealers.
- PART 3 - EXECUTION**
- 3.1 INSTALLATION**
- .1 Install casework in accordance with reviewed Shop Drawings and manufacturer's instructions.
 - .2 Install casework without variations in plane of adjoining surfaces. Use 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.
 - .3 Install casework level and plumb to a tolerance of 1/8 inch in 8 feet (3 mm in 2.4 m). Attach cleats to wall true, level, and square to return walls.
 - .4 Fasten cabinets to adjacent units and to backing.
 - .1 Fasten wall cabinets through back, near top and bottom, at ends and not less than 24 inches (600 mm) on center.
 - .5 Install Door Bumpers after doors have been hung and adjusted.

- .6 Apply a bead of silicone sealant to junctions of plastic laminate and wall surfaces and at the cabinet base/floor junction.
- .7 Apply a bead of silicone sealant around the base of plumbing fixtures penetrating the countertops.
- .8 Adjust casework and hardware so doors and drawers are centered in openings and operate smoothly without warp or bind. Lubricate operating hardware as recommended by manufacturer.

END OF SECTION