DIVISION 12

PLASTIC-LAMINATE CASEWORK

PART 1 GENERAL

1.01 SUMMARY

A. Section includes supplying plastic-laminate-faced casework; countertops; casework hardware and service fittings and outlets.

B. Plumbing Contractor shall install all sinks, faucets, strainers, tailpieces, traps, bubblers, gas cocks and valves and trim furnished by the casework supplier; Plumbing Contractor shall provide all labor to interconnect these items and connect these items to building systems.

C. Electrical Contractor shall install electrical equipment (variable voltage panels, etc.) furnished by the casework supplier as specified. Electrical Contractor shall provide all labor to interconnect these items with the building systems. The electrical contractor shall provide electrical boxes, plates and wiring devices. The casework contractor will provided the appropriate cutouts as noted on the approved shop drawings.

D. HVAC Contractor shall install all mechanical devices furnished by the casework supplier as specified. HVAC Contractor shall provide all labor to interconnect these items to the building systems.

E. If fume hoods are included as part of the casework contract the fume hood motor / fan assemblies, ducting, dampers and control devices shall be provided by the HVAC or other designated contractor(s) per the mechanical specifications. The casework contractor only if shown on approved shop drawings shall provide fan switches.

F. Calibration and balancing of fume hoods is the responsibility of the HVAC contractor.

G. Furnish and place appliances, which are explicitly included in the casework, contract where noted on architectural drawings.

H. The HVAC, Plumbing and Electrical Contractors shall extend building utilities to and connect appliances.

I. Work shall be conducted in accordance with General Conditions, Supplementary Conditions, Division 1 and the requirements of this Section.

J. Related Sections:

1. Section 07900 - Joint Sealers.
2. Section 09650 - Resilient Flooring: Base material.

3. Section 11600 - Laboratory Equipment.

1.02 REFERENCES

A. American National Standards Institute (ANSI).


C. National Electrical Manufacturers Association:
   1. NEMA LD 3 - High Pressure Decorative Laminates.

D. Composite Panel Association Buyer’s & Specifier’s Guide

1.03 DESIGN REQUIREMENTS

A. Manufacturers shall be members of AWI, have established quality control criteria

B. Casework shall meet or exceed load tests as outlined in ANSI A161.1.

C. Manufacturers shall comply, per architect’s specification, with special requirements related to the Americans with Disabilities Act, 28 CFR Part 36, ADA Standards for Accessible Design.

D. Items shall suit space conditions and where equipment is intended to occupy fixed locations, the physical conditions, roughing-in, etc., of the building are to control the absolute sizes and arrangements.

E. Project Standard:
   1. Stock numbers of items of equipment, as indicated on Equipment Schedules, have been selected from one manufacturer’s catalog for design purposes only.

   2. Items of equipment by approved manufacturers (other than the Project Standard) need not be identical to the items indicated, however, they must satisfy the same requirements, provide the same facilities (doors, drawers, etc.) and fulfill the same functions as the specified items.

   3. Where items of equipment by approved manufacturers (other than Project Standard) are not of the same lengths as the items indicated, adjust equipment layouts as follows:
a. Where items of equipment are against the wall and confined by walls at both ends.

1) Add a filler panel (not to exceed 4” wide), and/or

2) Increase the length of one or more units, and/or

3) Add an additional item of equipment.

b. Where items of equipment are freestanding or are not confined by walls at both ends, adjust as above, except that overall length need only be approximate.

4. Materials used by all manufacturers must meet the requirements of these specifications; it is understood that the manufacturers vary in joinery; these specifications describe the construction offered by the first-named manufacturer.

5. It is intended that wood dowels shall secure cabinet body components and glue, but the use of concealed interlocking mechanical fasteners as approved by AWI 1600B-5-4.A especially designed for use with particleboard shall be acceptable.

6. Where items of equipment by approved manufacturers (other than the Project Standard) necessitate changes in mechanical or electrical services, said changes shall be the Contractor’s responsibility and shall be coordinated and accomplished at no additional cost to the Owner.

1.04 SUBMITTALS

A. Section 01600 - Product Requirements: Submittal requirements.

B. Shop Drawings:

1. Indicate casework locations, large-scale plans, elevations, cross sections, rough in and anchor placement dimensions, tolerances and clearances required.

2. Include utility rough-in dimensions.

C. Product Data:

1. Submit component dimensions, configurations, construction details, joint details, and attachments, utility and service requirements and locations.

2. Include associated components, including grommets, sink, sink fittings, appliances, fume hoods and other items as indicated on drawings.

3. Include manufacturer’s literature.
D. Samples (per architect’s request):
   1. Plastic Laminates
   2. Edge banding
   3. Hinges
   4. Pulls
   5. Catches
   6. Louvers
   7. Grommets

E. Sample Unit:
   1. When requested by the Architect, submit full-size cabinet, as herein specified.
   2. Submitted cabinets may be used in the Project.

F. Coordination Submittals:
   1. Copy same submittals to other trades and other Prime Contractors who have
      connecting or adjacent Work for coordination review and for locating their Work
      connected to or adjacent to the equipment specified herein.

G. Certification that the manufacturer’s assembly has been tested per ANSI A161.1.

1.05 QUALITY ASSURANCE

A. Qualifications:
   1. Manufacturer: Company specializing in manufacturing products specified in this
      Section with minimum ten years experience.

B. Mockup (per architect’s request):
   1. Section 01400 - Quality Requirements: Mockup requirements.
   2. Construct full size mockup including base and upper cabinet, complete with drawers,
      door, adjustable shelf and counter top.
   3. Locate where directed by Architect.
   4. Incorporate accepted mockup as part of Work.
1.06 DELIVERY, STORAGE AND HANDLING

A. Section 01600 - Product Requirements: Product warranties and product bonds.
B. Accept casework on site; inspect on arrival for damage.
C. Store and handle casework in manner to prevent damage and deterioration.
D. Provide packaging such as cardboard or other containers, separators, banding, spreaders and paper wrappings to protect metal items.
E. Store casework in a protected dry area, provided by the owner, away from direct sunlight, with temperature 70 degrees F (+/- 10) and relative humidity of 20–50%. Casework shall be stored elevated above moisture contact. Storage area must be isolated from outside weather conditions. Casework shall be installed only in areas where temperature and humidity are maintained within the above-stated range. Storage and installations in conditions other than those stated above will void all product warranties.
F. All cabinets to be complete with hardware attached (or provided loose where not practical to ship attached) with all necessary scribes, fillers and molding; all items to be marked on outside of packaging for identification.
G. Protect exposed finish surfaces by suitable means.
H. Coordinate size of access and route to place of installation.

1.07 SEQUENCING AND SCHEDULING

A. Coordinate casework installation with location and installation of service utilities.
B. Sequence installation to accommodate required utility connections.

1.08 WARRANTY

A. The manufacturer shall guarantee the casework against defects in materials and workmanship for a period of one year from date of acceptance.
B. Warranty shall cover the repair or replacement, at the manufacturer’s discretion of defective material.
C. Non-manufactured components and accessories, such as faucets, fittings and fume hoods, shall be covered by the specific manufacturer’s warranty.
PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Project Standard:

1. Drawings and specifications for casework and equipment are based upon plastic laminate institutional casework as manufactured by Wood-Metal Industries, a division of Wood-Mode, Inc., 100 East Sherman Street, Selinsgrove, PA 17870, (570)374-1176.

2. The specifications outline minimum material and construction standards; only products meeting or exceeding this minimum standard shall be acceptable.

3. The receiving of a bid does not necessarily indicate the manufacturer’s standard cabinetry is acceptable.

4. Contractor is required to revise their standard cabinetry to meet the product standards specified.

B. Acceptable Alternative Manufacturers (prior to bidding):

1. Trimline Series Modified
   TMI Systems Design Corporation
   50 South Third Avenue West
   Dickinson, ND 58601-5595
   (701) 225-6716 or (800) 456-6716

2. LSI Modified
   L.S.I. Corporation of America, Inc.
   2100 Xenium Lane
   Minneapolis, Minnesota 55441.

C. The design shall be in accordance with the Drawings for each item, complete with all required fillers, trim strips, backs, etc.

D. The equipment of the following specifications shall be the heavier, more substantial grade of equipment generally referred to as Institutional Grade, as compared to the lighter commercial grades, which will not comply with these specifications and will not be acceptable.
E. Colors for casework and counter tops shall be as selected by the Architect and shall not be limited in number of colors; Architect reserves the right to select any color offered by Wilsonart or Formica.

2.02 COMPONENTS

A. Cabinet Surfaces:

1. All exposed exterior cabinet surfaces shall be surfaced with a high pressure plastic laminate 0.028 inch (0.71mm) in thickness (GP28), meeting current NEMA standards for vertical grade.

2. Interior surfaces (concealed surfaces) and underside of wall cabinets shall be neutral in color and shall be thermally fused melamine laminate meeting current NEMA standards.

3. Units without doors and with glazed or glass doors to receive same interior as exposed exterior.

B. Edges:

1. Cabinet body leading edges shall be flat edge 0.020 inch PVC, machine applied with hot melt adhesive.

2. Doors and drawer edges shall be 3mm PVC, machine applied with hot melt adhesive, inside/outside length radiused, corner radiused and buffed.

C. Drawer bodies shall be constructed of ½” thick solid oak with dovetail joints. Laminate drawer boxes with doweled construction shall not be considered equal.

D. Lamination with natural hybrid P.V.A. Type III water resistant adhesives that cure through chemical reaction, containing no health or environmentally hazardous ingredients, are required; “contact” methods of laminating are not allowed.

E. Substrate for Laminated Surfaces:

1. Particleboard:

   a. Particleboard to be industrial grade, with a minimum density range of 45 to 50 pounds per cubic foot, balanced 3-ply construction and shall conform to ANSI A208.1-1993 specifications for medium density.

2.03 COUNTER TOPS

A. Laminate Counter Tops:
1. Decorative surface to be PF42 or GP 50 high pressure plastic laminate which meets or exceeds performance standards set by National Electrical Manufacturers Association (NEMA LD3-2000), as amended, for Class 1 applied with water resistant glue over 1 inch thick particleboard.

2. Underside shall be properly balanced with heavy gauge backing sheet.

3. Provide tops in as long as practical continuous lengths.

4. Provide mechanical fasteners at field joints.

5. The backsplash shall not be the post-formed cove type.

6. Backsplashes will be mechanically fastened.

7. Backsplash bottom and corner joints will be continuously sealed with silicone sealant.

8. Factory applied tops on mobile cabinets and other specialty cabinets shall be ¾" thick particleboard with plastic laminate top surface and balanced with phenolic backer sheet or equivalent. All edges to have PVC edge band (selected from manufacturer’s standard color offering) applied with hot melt adhesive.

B. Molded Epoxy Resin Tops:

1. Molded epoxy resin tops shall be molded from a modified epoxy resin that has been especially compounded and cured to provide the optimum physical and chemical resistance properties required of a heavy-duty laboratory tabletop.

2. Tops and curbs shall be a uniform mixture throughout their full thickness, and shall not depend upon a surface coating that is readily removed by chemical and/or physical abuse.

3. Tops and curbs shall be non-glaring and black in color. Tabletops shall be 1 inch thick, unless otherwise shown on the Drawings, with drip grooves provided on the underside at all exposed edges.

4. Further, all exposed edges except as indicated below, shall be eased at front top edge and at vertical corners.

5. 4” curbs shall be the same thickness as the tops, bonded to the surface of the top to form a square joint.

6. Provide drop-in sinks.

   a. Sink cutouts shall be machined to accommodate sink lips.
C. Stainless Steel:

1. Equipment herein specified, when constructed of more than one piece and/or sheet of metal, shall be continuously butt-welded, ground and polished smooth; field joints shall be as few as possible.

2. Welded parts shall be homogeneous, non-porous, and free from pits, cracks, imperfections or discolorations.

3. Welding shall be electric process, with joints ground and polished smooth.

4. The welding rods used shall be of the same composition as sheets of parts welded.

5. Counter Tops:
   a. Counter tops and like items, unless otherwise specified, shall be Type 304 with number 4 finish.
   b. Tops shall be reinforced on bottom side with hat channels and coated with sound deadening material.
   c. Field joints in tops shall be bolted where tops exceed length of available sheets and/or where building access does not permit the top to be brought into the building in one piece.

6. Backsplashes:
   a. Form on three sides of, and integral with, counter top of 14-gauge stainless steel with corners formed with a ¾” radius, both horizontal and vertical.
   b. Provide ¾” return down backside.
   c. Close ends of side splashes with ¾” radius.

7. Integral Sinks:
   a. Sinks shall be constructed of 14-gauge stainless steel with corners formed with a ¾” radius, both horizontal and vertical; sink sizes established on the drawings to be inside measurements.
   b. Partitions between sink compartments shall be double walled with ¾” radius corners, ¾” radius top edges, welded in place, ground smooth and polished.
   c. Fronts, bottoms and back of multiple compartment sinks shall be one piece with no overlapping joints or open crevices.
   d. Bottom of each compartment shall be molded at drain opening at center.
e. Where sinks occur in counter tops, they shall be entirely welded to the countertops with welds ground smooth and polished, with no trace of welding left, to give the appearance of one continuous piece.

f. Counter tops are to have a stainless steel backsplash 4 inches high.

g. Provide appropriate number of holes for specified faucets and drains.

D. Hard Wood Tops:

1. Wood tops shall be 1-¾” minimum thickness and shall be built up of maple strips laminated together with a durable finish.

2.04 HARDWARE COMPONENTS

A. Hinges

1. Standard hinges for wall cabinets, base cabinets and tall cabinet doors shall be of the heavy-duty, wrap around, institutional type with five knuckles, non-removable pin and rounded ends. Hinges for overlay door construction shall be 2-¾” high by .095” thick and hinges for lipped radius-ed construction shall be 2-½” high by .072 thick. Hinge swing shall be 270 degrees. Hinges shall be finished in colors selected from the manufacturer’s standard colors.

2. Offset kitchen cabinet type, plain butt hinges or hinges with removable pins will not be acceptable.

3. Hinge screws shall be concealed when door is closed.

4. Doors less than 40-¼” high shall have two hinges and those 40-¾” high and over shall have three hinges.

5. Optional concealed hinges shall be available with either 120 or 170-degree swing (per project specification).

6. Optional semi-concealed three knuckle hinges shall be available.

7. The number of semi-concealed or concealed hinges shall vary according to the door height as follows: 10-½” – 34-½” door height: 2 hinges, over 34-½” – 52-½” door height: 3 hinges, over 52-½” – 70-½”: 4 hinges, over 70-½”: 5 hinges.

8. Drawer Slides - Standard Drawers:
   a. Single-extension, bottom-mounted, epoxy powder coated with positive in stop, out-stop and out-keeper, lift-out disconnect, stay-closed design.
b. Captive nylon rollers both front and rear.

c. 100 pound load rating.

d. Slide shall have a manufacturer’s lifetime warranty.

9. Drawer Slides – File/Paper Storage Drawers: Full extension, three part progressive opening slide, 100 pound load rating, zinc plated or epoxy coated at manufacturer’s option.

B. Pulls shall be satin aluminum bent wire style, 4” on center.

C. Three-point locking handles, when provided, shall be installed in the field to prevent shipping damage to casework.

D. Adjustable shelf supports to be twin pin design with anti-tip up shelf restraints for both ¾” and 1” thick shelves, and provide slot to mechanically fasten shelf to clip; load rating minimum of 300 pounds per support.

E. Locks:

1. Locks to be removable core, five-disc tumbler type. Cabinets to be keyed alike per room, each room keyed differently and master keyed, unless noted otherwise on drawings.

2. Provide two keys per lock.

3. A maximum of six master keys shall be provided when requested.

2.05 MISCELLANEOUS COMPONENTS

A. Louvers and Grilles:

1. Provide manufacturers standard louvers or grilles on doors where specified.

2. Louvers are to be provided on each side of cabinet door opening to create a sealed uniform finish, where louvers are indicated on drawings: punched metal louvers with exposed sharp edges will not be permitted.

B. Tote trays shall be tan-colored high-impact polystyrene with aluminum cardholder.

C. Grommets: Provide grommets with covers at locations shown on drawings.

2.06 PLUMBING FIXTURES

A. Stainless Steel Sinks and Miscellaneous Fittings:
1. Project Standard: Sinks and fittings are based upon products manufactured by Just Manufacturing Company, 9233 King Street, Franklin Park, Illinois 60131.

2. The specifications outline minimum material and construction standards.

3. Only products meeting or exceeding this minimum standard shall be acceptable.

4. The receiving of a bid does not necessarily indicate the manufacturer’s standard product is acceptable.

5. Acceptable Alternative Manufacturer:
   a. Elkay Manufacturing Company
      2222 Camden Court
      Oak Brook, IL 60521
      (708) 574-8484

B. Epoxy Resin Sinks and Miscellaneous Fittings:

1. Project Standard: Sinks and fittings are based upon products manufactured by The Durcon Company, Inc., 1255 South Mill Street, Plymouth, Michigan 48170.

2. The specifications outline minimum material and construction standards.

3. Only products meeting or exceeding this minimum standard shall be acceptable.

4. The receiving of a bid does not necessarily indicate the manufacturer’s standard product is acceptable.

5. Acceptable Alternative Manufacturer:
   a. Epoxyn Products.
      P.O. Box 232, 206 Allison Drive
      Taylor, TX 76574
      (512) 352-5591

C. Faucets and Fixtures:

1. Project Standard: Faucets and fixtures are based upon products manufactured by Chicago Faucet Company, 2100 Clearwater Drive, Des Plaines, Illinois 60018.
2. The specifications outline minimum material and construction standards.

3. Only products meeting or exceeding this minimum standard shall be acceptable.

4. The receiving of a bid does not necessarily indicate the manufacturer’s standard fixtures shall be acceptable.

5. Acceptable Alternative Manufacturers (prior to bidding):
   a. WaterSaver Faucet Company
      701 West Erie Street
      Chicago, IL 60610
      (312) 666-5500
   b. Wolverine Brass Company
      2951 Highway 501 East
      Conway, SC 29526
      (800) 944-9292
   c. Chicago Faucet Company
      2100 Clearwater Drive
      Des Plaines, IL 60018
      (847)803-5000

D. Fume Hoods:

1. Project Standard: Fume hoods are based upon products manufactured by Air Master Systems Corporation, 6480 North Center Drive, Muskegon, Michigan 49441.

2. The specifications outline minimum material and construction standards.

3. Only products meeting or exceeding this minimum standard shall be acceptable.

4. The receiving of a bid does not necessarily indicate the manufacturer’s standard fixtures shall be acceptable.

5. Acceptable Alternative Manufacturers:
   a. Labconco Corporation
2.07 FABRICATION

A. Base Cabinets:

1. Non-exposed surfaces shall be faced with thermally fused melamine laminate.
2. Exposed surfaces shall be surfaced with high-pressure plastic laminate.
3. Sub tops and bottoms shall be ¾” thick, edged with 0.020” PVC on front.
4. Backs to be ½” thick trapped in sides and sealed with hot-melt adhesive.
5. Side panels to be ¾” thick, edged with 0.020” PVC on front edge.
6. External hanger rails, ¼” thick and a minimum of 3” high, shall be mechanically fastened to sub top, bottom and both sides.
7. An intermediate rail shall be ¾” thick x 4” melamine-(concealed interior) and high-pressure plastic laminate-(exposed interior) to be secured to cabinet sides with 8-mm hardwood dowels on 32-mm centers, glued and screwed.
8. Sub bases to be separate (no cabinet body sides-to-floor), water-resistant plywood with concealed fastening to cabinet bottom.
B. Wall Cabinets:
1. Non-exposed surfaces shall be faced with thermally fused melamine laminate.
2. Exposed surfaces shall be surfaced with high-pressure plastic laminate.
3. Tops and bottoms shall be 1” thick, edged with 0.020” PVC on front.
4. Backs to be ½” thick trapped in sides and bottoms and sealed with hot-melt adhesive.
5. Side panels to be ¾” thick, edged with 0.020” PVC on top, bottom and front.
6. External hanger rails, ¾” thick and a minimum of 3” high, shall be mechanically fastened to top, bottom and both sides of wall cabinets. Rails shall be located at top and bottom of cabinets.
7. Sub bases to be separate (no cabinet body sides-to-floor), water-resistant plywood with concealed fastening to cabinet bottom.

C. Tall Casework:
1. Non-exposed surfaces shall be faced with thermally fused melamine laminate.
2. Exposed surfaces shall be surfaced with high-pressure plastic laminate.
3. Tops shall be 1” thick edged with 0.020” PVC on front.
4. Bottoms and side panels shall be ¾” thick edged with 0.020” PVC on front.
5. Backs to be ½” thick trapped in sides and sealed with hot-melt adhesive.
6. External hanger rails, ¾” thick and a minimum of 3” high, shall be mechanically fastened to top, bottom and both sides of tall cabinets. Rails shall be located at top and bottom of cabinets.

D. Sink Cabinets:
1. Sink cabinets shall be constructed with vertical head rails at front and rear of cabinets in lieu of full sub tops.
2. Removable backs shall be provided for all sink cabinets.

E. Tops, bottoms, sub tops, intermediate rails, fixed partitions and fixed shelves where applicable to be glued and doweled to cabinet sides. Cabinets shall be clamped under pressure to insure joint integrity and unit squareness.

F. Cabinet Backs:
1. Exposed exterior backs to be ¾” thick particleboard faced with high-pressure plastic laminate.

2. Removable backs, where specified, shall be attached to cleats secured to the cabinet sides and bottoms. Back panels shall be secured in place with pan head screws.

G. Drawers:

1. Drawer sides, back and front shall be, ½” thick solid oak. Top edges shall be radiused and free of rough edges.

2. Drawer boxes shall be assembled with glued dovetail construction at all four corners.

3. Drawer bottoms shall be ¼” thick hardboard with finished surface of wear-resistant oak reversed-grain vinyl and trapped in grooved drawer box.

4. Underside of drawer to be sealed with a continuous bead of hot melt adhesive to enhance drawer integrity.

5. Reinforce drawer bottoms with a hardwood front-to-back intermediate underbody stiffener, hot melt glued and fastened; one above 24” and two at 42” and wider.

6. Separate plastic laminate drawer fronts shall be applied to completed drawer box assemblies.

7. Provide clip and rail hanging file system for legal or letter size as indicated by manufacturer’s model number.

H. Door and Drawer Fronts:

1. Hinged and sliding doors and drawer fronts shall be ¾” thick particleboard faced on both sides with high-pressure plastic laminate. Drawer fronts and hinged doors are to overlay the cabinet body, maintaining a reveal between doors and drawers.

2. Edging shall be 3mm PVC applied with hot-melt adhesive.

3. Sliding doors shall have a composite bottom track and top guide. Rollers shall be routed into bottom of door. Doors over 48” in height shall have an overhead aluminum track and bottom guide.

4. Framed doors, for glazed panels or tack board inserts, shall have ¾” thick hardwood frames faced on both sides with high-pressure plastic laminate. Glazed panels shall be ¼” thick tempered safety glass.

5. Sliding glass doors shall be ¼” thick tempered safety glass, fitted into top and bottom aluminum tracks. Bottom tracks shall have rollers for smooth operation.
I. Adjustable Shelves

1. Non-exposed shelves shall be faced on both surfaces with thermally fused melamine laminate. Exposed shelves shall be faced on both surfaces with high-pressure plastic laminate.

2. Shelf thickness shall be 1”.

3. Shelves shall be full depth and adjustable on 32mm (1-¼”) increments.

4. Front edge of shelves shall be finished with 0.020” thick PVC, applied with hot melt adhesive.

J. Fixed Shelves:

1. Non-exposed shelves shall be faced on both surfaces with thermally fused melamine laminate. Exposed shelves shall be faced on both surfaces with high-pressure plastic laminate.

2. All non-supported fixed shelves and exposed shelves shall be 1” thick. All supported fixed shelves shall be ¾” thick.

3. Shelves shall be full depth and doweled to cabinet sides.

4. Front edges of shelves shall be finished with 0.020” thick PVC, applied with hot melt adhesive.

2.08 COLORS

A. Selected by Architect as provided by these specifications (in particular Paragraph 2.01.E).

PART 3 EXECUTION

3.01 INSTALLATION

A. Install casework, components and accessories under manufacturer representative’s supervision whenever possible, using skilled labor especially trained for this work. Cabinets are to be installed in a professional and industry-accepted manner, including all scribes, moldings and necessary trim, complete and in operating condition according to outlined plans and specifications.

B. Set casework items plumb and square, securely anchored to building structure.

C. Furnish casework complete with trim strips, fillers, backs, etc., as may be required; all cutouts required for trim, sinks, etc., shall be made by the casework supplier.
D. Unless noted otherwise, furnish all sinks, faucets, bubblers, baskets, tailpieces, traps and gas cocks as shown on approved shop drawings for installation and hook-up by Plumbing Contractor.

E. Fume hoods and exhaust booths shall be pre-plumbed and pre-wired.

F. The HVAC Contractor will provide exhaust fans and motors.

G. Field touch-up blemishes to original finish as approved and accepted by the Architect.

H. Discard or remove and replace damaged members.

3.02 ADJUSTING

A. Adjust doors, drawers, hardware and other moving or operating parts to function smoothly.

B. Adjustable shelves shall be installed consistent with the shop drawings.

3.03 CLEANING

A. All packaging material and installation-related debris shall be placed in an owner-provided dumpster on the construction site. The work area shall be left broom clean.

B. Installer shall remove all pencil marks, adhesive and sawdust resulting from this work.

C. Plastic laminate casework shall be cleaned inside and out to remove the installation related dust and debris.

3.04 PROTECTION OF INSTALLED CONSTRUCTION

A. Protection of installed casework shall be the responsibility of the general contractor or owner’s representative. The owner’s representative shall provide materials and labor.

END OF SECTION