

SPECIFICATIONS for MODULAR laminated CASEWORK

SECTION 12300 - MANUFACTURED CASEWORK

PART 1: GENERAL

- 1.01 SECTION INCLUDES
- A. Manufactured composite panel casework
 - B. Counter tops and backsplashes
 - C. Casework hardware
 - D. Connection to utilities
- 1.02 RELATED SECTIONS
- A. Division 6 Rough Carpentry - Blocking within walls to support casework.
 - B. Division 7 Joint Sealants - Caulking of casework to abutting finished surfaces.
 - C. Division 8 Finish Hardware - Lock and key schedule.
 - D. Division 9 Resilient Base - Cove supplied and installed by others.
 - E. Division 15 Mechanical - Connection of plumbing fixtures and HVAC to be supplied and installed by Mechanical Contractor to code.
 - F. Division 16 Electrical - Final connections of electrical inside the casework to be performed by the Electrical Contractor to code.
- 1.03 DEFINITIONS
- A. Identification of installed casework components by finish.
 - 1. Exposed Surfaces: Describes finish level for exterior surfaces, including edges, backs of hinged doors and interior of cabinets.
 - 2. Concealed Surfaces: Describes all surfaces and parts not visible after installation.
 - 3. Visible Surfaces: Describes all surfaces and parts visible after furniture installed.
- 1.04 QUALITY ASSURANCE
- A. All cabinetry is to be modular in design and constructed to permit re-configuration at a future date. The OWNER, or their representative, reserves the right to reject any proposal which fails to meet the specifications as written.
 - B. Selection of a supplier shall be limited to a company with a minimum five years' experience in providing modular casework for similar projects. Evidence of financial stability, adequate plant size and personnel to complete the project on schedule must be presented if requested.
 - C. Selection of an Installation Contractor, other than the casework supplier, shall be limited to a company specializing in performing the scope of work with minimum three years' experience and approved by the casework supplier.
- 1.05 SUBMITTALS
- A. Comply with Division 1 submittal provisions, unless otherwise instructed.
 - B. Product Data: Provide Manufacturer's Catalog with specifications and construction details.
 - C. Shop Drawings: Indicate dimensions, material descriptions and finishes, casework and utility locations, small scale plans showing casework relative to building interior, large scale elevations, cross sections, rough-in and anchor placement dimensions and tolerances, clearances required, and relationship to adjoining surfaces.
 - D. Submit two finish samples of manufacturer's standard range of laminates and PVC edgings for approval.
 - E. Submit casework samples if requested.
 - 1. Base Cabinet: Conforming to specifications, with drawer, door and adjustable shelf configuration. Hardware finishes being per specifications. Include attached sample of worktop.
 - 2. Wall Mounted Cabinet: Conforming to specifications, with door and adjustable shelf configuration. Hardware finishes being per specifications.
- 1.06 PRODUCT HANDLING
- A. Accept completed casework and related products on jobsite. Inspect upon arrival for damaged or missing items.
 - B. Protect casework from dampness during and after delivery. Do not expose casework to extreme fluctuations in temperature or humidity.
 - C. Do not store or install casework in buildings until concrete and other wet work is completed.
 - D. Store flat panels and worksurfaces face-to-face in horizontal position. Do not store on damp surfaces, use blocking to elevate panels. Contractor or owner must store casework in an environment with ambient temperature of not less than 68 degrees with relative humidity between 20 and 50 percent.
 - E. Building interior must be climate controlled by permanent HVAC systems to begin installation. Notify the owner in writing of any unsatisfactory conditions.
- 1.07 FIELD MEASUREMENTS
- A. It is the responsibility of the Installation Contractor or agent of the casework supplier to verify field dimensions and note discrepancies with those dimensions indicated on the architectural drawings.
- 1.08 SCHEDULING
- A. Schedule the installation to facilitate utility connections per the construction schedule.
 - B. Coordinate installation schedule with affected tradesmen and contractors.
- 1.09 WARRANTY
- A. Modern Industrial Design LTD (M.I.D.), dba Neocase, warrants to Original End Consumer that Neocase products will be free from defects in workmanship, material, and as specified in the contract. This warranty applies to the Original End Consumer and terminates in the event of sale, modification, or transfer of ownership of Neocase products. This limited lifetime warranty has no expiration, and is in effect as long as the Original End Consumer owns the product. Original End Consumer is defined as the entity that takes title to the product and makes the first end use of the product for its own purposes. Neocase warrants to Original End Consumer that it will, at its discretion, repair or replace, or refund the purchase price of any product that is defective in material or workmanship. All claims must be submitted in writing. This warranty does not apply to wear and tear under normal usage; exposure to extreme heat or moisture; alterations, abuse, or accidental damage; failure to install or maintain product in accordance with Neocase published guidelines; or the use of any unauthorized non-Neocase components in a Neocase installation. Neocase's liability for component parts or materials manufactured by others included in or sold as finished products shall be limited to the warranty of the component manufacturer. This warranty is exclusive and in lieu of any other warranties. It does not cover consequential or incidental damages, such as loss of use or time.

PART 2: PRODUCTS

- 2.01 ACCEPTABLE MANUFACTURERS
- A. Drawings, Catalog Numbers and Specifications are Neocase, a modular casework system by Modern Industrial Design, LTD., PO Box 5658, Winston Salem, NC 27113-5658. Products specified are for clarity of description and as a standard of comparison and are those of Modern Industrial Design, Ltd. The use of neocase specifications is to establish a level of quality of material and workmanship and does not exclude the use of other manufacturer's product which complies with the minimum level of specifications indicated.



- 2.02 STANDARD MATERIALS
- A. Manufactured Wood Particle Composite Panels used for all cabinet component cores
 - 1. Industrial Grade Particleboard panels up to 7/8" thick (1-1/8" worksurface)
 - a. Composition: ANSI-A208.1-1999, M-3
 - b. Fire Rating: ASTM E84; Class C
 - c. Density: Multi-Density averaging 47-lbs / cu ft
 - d. Moisture Content: 6%
 - B. Edging Material. All edgebanding is to be applied with heat and pressure using an industry standard hotmelt adhesive. 1mm thickness shall be the nominal thickness specified.
 - 1. 1mm rigid or semi-rigid PVC banding. Cabinet body edges with exposed or visible edges receive 1mm PVC banding. Concealed edges on side panels receive 1mm PVC banding. Adjustable shelves and mail sorter shelves receive 1mm on all four sides.
 - 2. 3 mm rigid or semi-rigid PVC banding. Finished with a machined edge profiled to 3mm radius. Drawer fronts, door fronts and panels receive 3 mm PVC banding on all edges. Worksurfaces and splashes receive 3 mm banding on all edges.
 - C. Melamine Resin Impregnated Laminate
 - 1. Conform to Industry specification: NEMA LD 3 -1995 covering Thermally Fused Melamine laminates.
 - D. Decorative Laminates
 - 1. Conform to Industry specification: NEMA LD 3 -1995 covering VGS and HGS Grade High Pressure Laminates.
 - E. Chemical Resistant Laminates
 - 1. Conform to Industry specification: NEMA LD 3 -1995 covering Chemical Resistant High Pressure laminates.
- 2.03 ALTERNATE PANEL MATERIAL FOR WORKTOPS FOR USAGE IN LABORATORY SETTINGS
- A. Trespa Panels
 - 1. Trespa brand Athlon or Toplab Phenolic core material. Architect to specify thickness and finish.
 - 2. Composition: 70% Kraft Paper, 30% Phenolic Resin
 - 3. Fire Rating: ASTM E-84: Class A (25)
 - 4. Weight: 93 lbs. per cubic Foot
 - 5. Moisture Content: 3% non porous product
 - B. Durcon Epoxy Resin
 - 1. Epoxy resin material. Architect to specify thickness and finish.
 - 2. Composition: Epoxy resin and inert asbestos free materials
 - 3. Fire Rating: ASTM D794: Class A (25)
 - 4. Weight: 120 lbs. per cubic foot (1" thick)
 - 5. Moisture Content: .01% non porous product
- 2.04 CABINET HARDWARE
- A. Pulls
 - 1. Door and drawer front pulls are a "Wire Pull" nickel plated steel with a minimum 10 mm diameter. The nominal length of pull is 5 inches.
 - 2. Pull design shall comply with the Americans with Disability Act guidelines.
 - 3. Black epoxy powder coated selection available as alternative.
 - B. Hinges
 - 1. Concealed European style cup hinge with minimum 165 degree opening angle. Must maintain standard door reveals of 4mm on sides. Provide two (2) hinges per door on casework up to 46 inches high and four (4) hinges per door up to 91 inches high.
 - 2. Alternative hinge system, is an exposed knuckle cup mounted 270 degree hinge available in chrome or black finishes. This hinge exceeds BIFMA specifications.
 - C. Drawer Slides
 - 1. Personal, box, storage and deep storage drawers use an integrated drawer slide and side. This drawer system is bottom mounted and available in a white epoxy powder coat finish. Additional technical values:
 - a. Dynamic Load Capacity: 100 pounds.
 - b. Static Load Capacity: 125 pounds.
 - c. Permanently lubricated nylon rollers.
 - d. Parallel self-closing action.
 - e. 16 gage steel construction.
 - 2. Alternate soft-close drawer system with a double-walled, steel drawer system concealing a full extension slide. This drawer system contains an Airmatic shock absorber that slows the momentum of a closing drawer offering a gentle stop.
 - a. Dynamic Load Capacity: 88 pounds.
 - b. Concealed levers allow removal of the drawer front for cleaning and reattachment.
 - c. Full extension slides.
 - d. Finished with a two-coat, fingerprint resistant gloss process.
 - e. Drawer bottom and back are 5/8" thick laminated melamine.
 - 3. File Drawers use a metal drawer side with melamine laminated bottom and back panels. This drawer system uses a side mounted Accuride full extension drawer slide. File bars are available for lateral filing.
 - a. Load Capacity: 150 pounds.
 - b. Metal ball bearing mechanism.
 - D. Wall Cabinet Suspension System
 - 1. System consists of a wall mounted track and a suspension bracket extending through the back panel of the Wall Cabinet. The bracket hooks over the track and is clamped in place with screw pressure.
 - 2. This system allows the Wall Cabinets to be modular for reconfiguring at a future date.
 - 3. The semi-concealed nickel-plated steel wall mounting bracket inside the cabinet allows for vertical and depth adjustments to achieve a plumb and square installation. Additional technical values:
 - a. Vertical adjustment to be minimum 1/2 inch. Fore and aft adjustment to be minimum 3/8 inch.
 - b. Load bearing capacity to be 140 pounds per bracket with a minimum of two (2) brackets per cabinet.
 - c. Access to adjustment screws in interior of cabinet.
 - d. Wall mounted attachment rail is zinc plated steel and available in lengths of 96 inches.
 - E. Furniture Leveler in laminate integral base.
 - 1. Steel corner leveler with support lip under side panel that is screw mounted to side panel. This adjustable leveler has a minimum load capacity of 330 pounds per leveler. Provide minimum of four (4) levelers per cabinet.
 - 2. Leveler adjusts up to 3/4" in height using a 4 mm hex driver.
 - 3. Leveler adjustment screw is to be accessible through 3/8" inch diameter hole in bottom of cabinet.
 - 4. Provide decorative plug to fill leveler hole after completing adjustment.
 - F. Alternate Metal Base
 - 1. Available in black powder-coated 20 gauge steel or stainless.
 - 2. Levelers rated at minimum load capacity of 200 pounds.
 - 3. Leveler adjustment screw is to be accessible through 3/8" inch diameter hole in bottom of cabinet.
 - 4. Provide decorative plug to fill leveler hole after completing adjustment.
 - G. Cabinet Gang Bolt
 - 1. Steel flat head bolt and nut assembly available in nickel. Length is sufficient to secure the side panels of two adjacent cases together. Minimum of two bolts are required to secure cases together.

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2. A 3/8 inch hole must be bored through both adjoining side panels and a 4 mm hex wrench is required to tighten bolt.
- H. Locks
1. Removable lock core system available in nickel or black finishes. Each lock is furnished with two (2) keys.
 2. Make available varying key core numbers and master key to allow end user secure operation and control.
 3. Contact manufacturer for heavier duty lock availability.
- I. Sliding Door Track
1. Black plastic double track to capture 3/4 inch doors top and bottom.
- J. Shelf Supports
1. Plastic injection mold-covered metal shelf support for 5 mm diameter holes that secures shelf in place with a locking tab.
 2. Shelf supports are adjustable in 32 mm increments.
- K. Cable and Paper Grommets
1. Cable grommet is a 2.0-inch diameter plastic model available in white or black.
 2. Paper slot is 12 inches long by 2.5" wide and available in black only.
- L. Task Lights
1. Task lights shall be UL approved.
 2. They are to be screw mounted to bottom of wall mounted casework.
 3. All task lights must be available for hard wire installation or be capable of daisy chain installation per architectural drawings.
 4. Finishes are to coordinate with casework finishes selected by the architect.
- M. Wardrobe Hanger Rod
1. 1 inch diameter chrome plated steel with captive sockets.
- N. Glazed Door Frames
1. Hinged or sliding 3/4 inch thick framed doors with acrylic panel inserts. The acrylic panel is secured into the frame using a continuous plastic molding. This molding is available in white, gray or black.

2.05

CASEWORK FABRICATION

A. Nominal Dimensions for "Balanced Panel" Cabinet Components

1. End panels shall be a 3/4 inch thick melamine panel minimum.
2. Top and floor panels shall be a 3/4 inch thick melamine panel minimum. These components must be a continuous panel from front to back of case. Rail construction of top is not acceptable.
3. Doors and drawer fronts shall be a 3/4 inch thick melamine panel minimum.
4. Back panels shall be a 3/4 inch thick melamine panel minimum.
5. Adjustable mail slots shall be a 3/4 inch thick melamine panel minimum.
6. Adjustable shelves shall be a 3/4 inch thick melamine panel minimum. Shelves in cases wider than 30 inches shall have a continuous metal "C" channel support along the back edge.
7. All construction panels including the back panel are minimum 3/4 inch thick, finished with a melamine resin impregnated paper, thermally fused to an industrial particleboard core, then edgebanded with a nominal 1 mm PVC on visible edges. All panels are accurately machined for premium grade joinery construction utilizing automated computer-controlled machinery to ensure consistent sizing of components.

B. Drawers

1. Drawers are to be constructed using an integrated metal drawer side and slide system. These components shall be 16 gauge steel with a powder coat finish.
2. Drawer bottom and back shall be a 3/4 inch thick melamine panel minimum on the standard drawer, 1 mm edgebanded on exposed edges; 5/8 inch thick melamine panel minimum on the soft-close drawer with 1mm edgebanded on exposed edges.

C. Cabinet Body Construction

1. Tops, bottoms and fixed horizontal internal members are glued and doweled to cabinet sides. A minimum of 6 dowels connects each horizontal joint for 24 inch deep cabinets. Wall or Storage Cabinets 12 inches deep have a minimum of 4 dowels.
2. Side panels and vertical dividers are bored with 5 mm diameter holes drilled 32 mm on center and used to mount adjustable shelving, drawer rails, and related hardware.
3. Base or floor cases are delivered with an integral kick base with a 3 inch deep recess that is 4 inches high or with a black PC coated or stainless steel kick. All base and floor cases have furniture levelers.
4. All case backs are finished.
5. Base Cabinets, with the exception of sinks have a full sub top.
6. Adjustable shelves are thermally fused melamine on particleboard core panels with a minimum thickness of 3/4 inch. Widths over 30 inches are supplied with a epoxy powder coated metal stiffener bar that attaches to the back of the shelf.

D. Worktop and Splash Construction

1. Fabricate worktops from 1-1/8 inch thick core material with 3 mm PVC banding on all four (4) edges applied with industry standard hotmelt glue.
2. Supply water resistant core material of the same thickness for all applications.
3. High Pressure Laminated worktops must have a laminated backer. Balanced panel construction is required on all panels.
4. Cutouts for plumbing fixtures, electrical or data boxes and other fixtures and fittings as per architectural drawings provided in field unless specified. Verify locations of cutouts from on-site dimensions. Contractor primes or seals cut edges with paint or silicone sealer.

PART 3: EXECUTION

3.01

INSPECTION

- A. Verify that work areas are ready to receive cabinets.
- B. Verify that utilities are properly located and ready for casework installation.
- C. Notify the building owner in writing of any unsatisfactory conditions.
- D. Commencement of installation indicates installer accepts existing conditions.

3.02

INSTALLATION

- A. Allow cabinets to acclimate to the existing temperature and humidity conditions prior to installation.
- B. Set casework plumb and square, securely anchored to building structure. Install casework, components and accessories in accordance with manufacturer's instructions. Use anchoring devices to suit conditions and substrate materials encountered.
- C. Install Wall Cabinet suspension system on wall to facilitate installation of Wall Cabinets.
- D. Scribe to abutting finished surfaces and align adjoining components.
- E. Repair small scratches and surface blemishes on units using manufacturers' supplied touch up materials or replace units as required.
- F. Make final adjustments to door hinges and drawer fronts. Doors and drawer fronts shall be adjusted to provide consistent reveals vertically and horizontally at all locations.
- G. Replace casework exhibiting signs of warping, surface discoloration or defects at no additional cost to owner.

3.03

CLEANING

- A. Leave cabinets and drawers clean inside and out. Remove fingerprints, pencil marks, surface dirt and shipping labels in preparation for final cleaning by the owner.
- B. Remove all packaging material and casework installation debris from work area.

3.04

PROTECTION OF FINISHED WORK

- A. Do not permit finished casework to be exposed to continued construction activity. Protect worktops from construction related damage. Notify the building owner in writing of any damage from other tradesmen.