

Casework / Cabinets Basis of Design

SECTION 20221222 METAL LABORATORY CASEWORK

PART 1 - GENERAL

Laboratory casework shall be as specified and shall be compliant with the SEFA8M-2016 standard. Unless otherwise specified, laboratory cabinets shall be constructed of steel and shall be of the modular design type.

PART 2 - PRODUCTS

METALCASEWORK- 2 Doors/ 2 Drawer Casework

➤ MINIMUM METAL GAGE:

Steel laboratory furniture components shall be provided of following minimum standard:

- 1) 18 ga Drawers, interior door panels, removable back panels, shelves, bottoms, tops. Reinforcement shall be added for shelves over 36 inches long.
- 2) 18 ga Sides, ends, fixed backs, outer drawer panels.
- 3) 16 ga Drawer runners support, casework crossbeam, vertical posts and corner reinforcements.

> FABRICATION:

- 1) BASE UNITS: Each unit shall have a completely welded shell assembly. End panels and back be formed of one piece, wrap-around design, with front post channel, and internal rear reinforcing posts to provide rigidity and strength. Front posts be fully closed and shall have a full height reinforcing upright containing shelf adjustment holes and providing vertical rabbet for doors and drawers. Rear internal posts shall contain shelf clip adjustment holes.
- REMOVABLE BACKS: Cupboard base units have integral fixed backs of one piece, formed as part of the cabinet body, with access panels removable with the use of common tools.
- 3) FIXED BACKS: Drawer units devoted to drawers have integral fixed backs of one piece with access cutout in back.
- 4) BOTTOM: The base unit case bottoms shall be one-piece construction.
- 5) TOE SPACE: Integral toe space on base cabinets is deep.

- 6) DRAWERS: Drawer bodies shall be of one-piece construction including the bottom, two sides, back and inner front. Interior bottom shall be coved on all four sides for easy cleaning.
- 7) DRAWER FRONTS: Interchangeable flush mounted drawer fronts shall be double-wall construction, and sound deadened. All interior surfaces shall be painted before assembly. Top front corners shall be welded and ground smooth.
- 8) DRAWER GUIDES: Drawer suspension shall be heavy-duty with coved raceways for self-centering of drawer. Drawer run with coved raceway shall be welded to drawer body. Case channel with coved raceways shall be fastened to case with screws.
- 9) Drawers have rounded nylon tired, ball bearing rollers which fit raceways of drawer suspension. Drawers shall lock open when in full open position and shall have selfclosing feature. Drawers shall be removable without the use of tools. Drawers shall be provided with rubber bumpers for cushioned closing. File drawers shall have full extension slides for full access and operation.
- 10) HINGED DOORS: Hinged doors shall be steel. Doors shall be double wall telescoping box construction, with front panel and inner liner. Front panel shall have steel hat channel reinforcement welded inside. All shall have integral fixed backs of one piece. All interior surfaces shall be painted for protection from corrosion. Door shall be sound deadened on interior. Hinges shall be removable. Door closing action shall be against rubber bumpers.
- 11) ADJUSTABLE SHELVES: Shelf inside is height adjustable.

> CASEWORK FINISH:

Reagent resistant electrostatically applied epoxy powder coating finish shall be provided on all steel equipment in accordance with the following specifications:

- 1) All metal shall be spray cleaned with a heated cleaner/phosphate solution and pretreated with iron phosphate spray followed by a neutral finish seal prior to application of final finish.
- 2) All treated parts shall be immediately dried in heated ovens and gradually cooled before application of the finish. Treated metal parts shall be clean and properly prepared to provide optimum adhesion of finish and resistance to corrosion.
- 3) Finish for metal equipment shall be a high-grade laboratory furniture quality, chemical resistant baked epoxy powder coat of color selected from the manufacturer's standard colors, electrostatically applied. Powder coating shall be baked in a controlled high temperature continuous oven, assuring uniform curing to a smooth, hard satin finish.

> CASEWORK HARDWARE AND ACCESSORIES

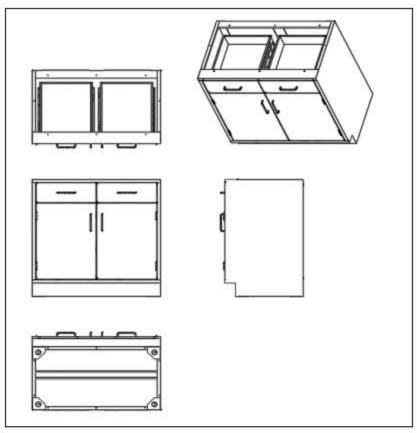
1) HINGES (METAL):

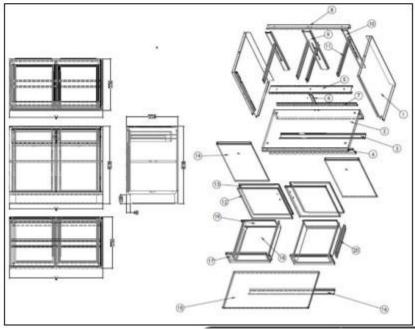
Hinges: Type 304 stainless steel with hinge barrel only projecting beyond face of cabinet.

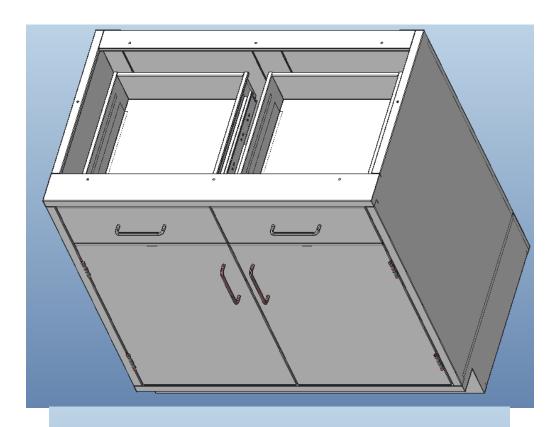
2) PULLS:

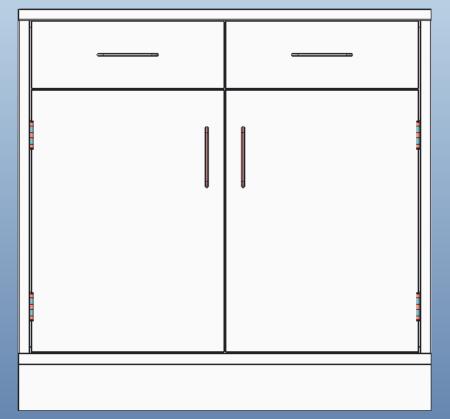
Pulls: Type 304 stainless steel.

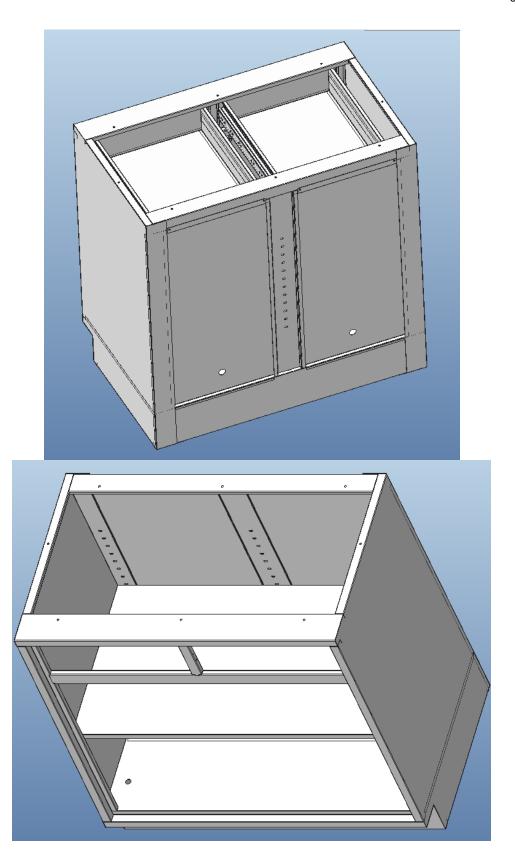
> CASEWORK STRUCTURE

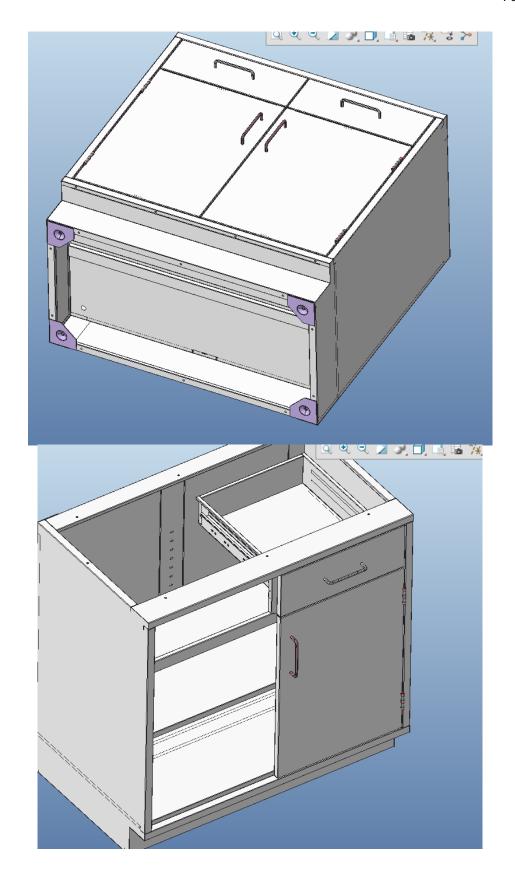


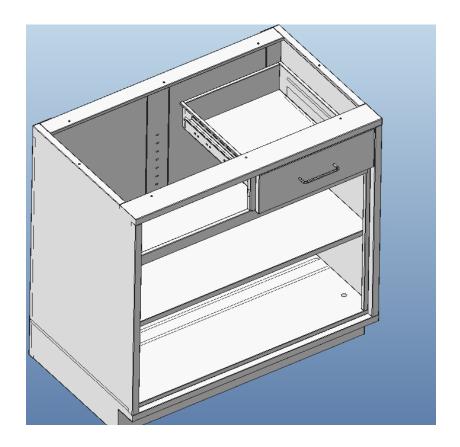












METAL LABORATORY CASEWORK

PART 1-GENERAL

Laboratory casework shall be as specified and shall be compliant with the SEFA8M-2016 standard. Unless otherwise specified, laboratory cabinets shall be constructed of steel and shall be of the modular design type.

PART 2 - PRODUCTS

METALCASEWORK- Flammable Cabinet

> MINIMUM METAL GAGE:

Steel laboratory furniture components shall be provided of following minimum standard: All the materials for flammable cabinet made thickness cold rolled steel.

> FABRICATION:

- 1) BASE UNITS: Each unit shall have a completely welded shell assembly. End panels and back be formed of one piece, wrap-around design, with front post channel, and internal rear reinforcing posts to provide rigidity and strength. Front posts be fully closed and shall have a full height reinforcing upright containing shelf adjustment holes and providing vertical rabbet for doors and drawers. Rear internal posts shall contain shelf clip adjustment holes.
- 2) Cabinet structure: Sturdy double wall steel construction with of insulating.
- 3) Fully welded, construction holds squareness for longer life and offers greater protection in a fire since air gaps are reduced.
- 4) BOTTOM: The base unit case bottoms shall be one-piece construction.
- 5) TOE SPACE: Integral toe space on base cabinets is deep
- 6) HINGED DOORS: Continuous piano hinge provides smooth closure.
- 7) ADJUSTABLE SHELVES: Shelf inside is height adjustable, shelf made in galvanized steel.
- 8) Welded shelf hangers interlock with shelf to offer maximum "nonslip" stability with no flimsy brackets to lose.
- 9) VENTS: Dual vents with built-in flash arresters strategically placed at back side.

CASEWORK FINISH:

Reagent resistant electrostatically applied epoxy powder coating finish shall be provided on all steel equipment in accordance with the following specifications:

- 1) All metal shall be spray cleaned with a heated cleaner/phosphate solution and pretreated with iron phosphate spray followed by a neutral finish seal prior to application of final finish.
- 2) All treated parts shall be immediately dried in heated ovens and gradually cooled before application of the finish. Treated metal parts shall be clean and properly prepared to provide optimum adhesion of finish and resistance to corrosion.
- 3) Finish for metal equipment shall be a high-grade laboratory furniture quality, chemical resistant baked epoxy powder coat of color selected from the manufacturer's standard colors, electrostatically applied. Powder coating shall be baked in a controlled high temperature continuous oven, assuring uniform curing to a smooth, hard satin finish.
- 4) Durable and chemical-resistant, lead-free powder-coat paint finish, inside and out, retains high gloss look and minimizes the effects of corrosion and humidity.

> CASEWORK HARDWARE AND ACCESSORIES

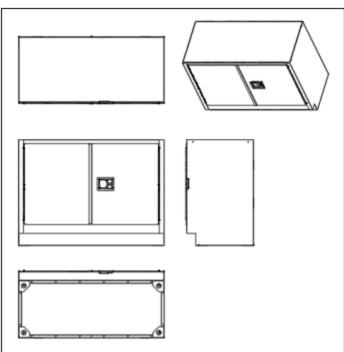
1) HINGES (METAL):

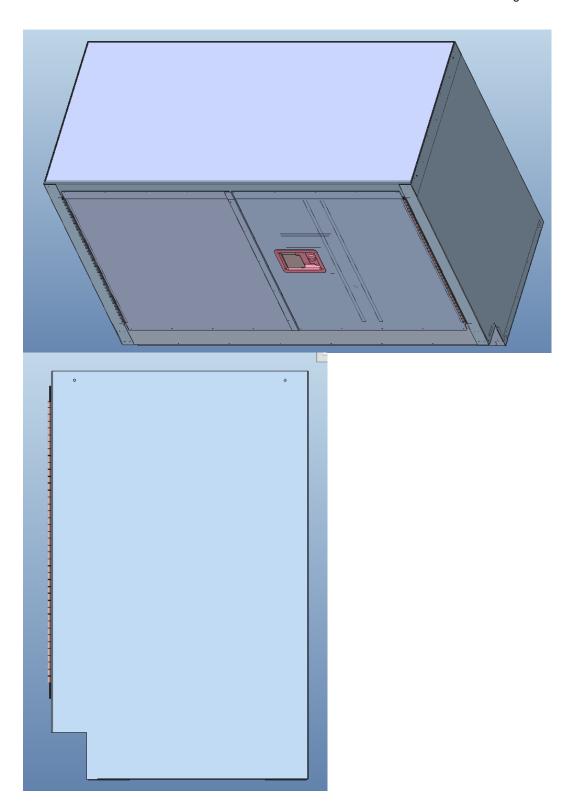
Hinges: Continuous piano hinge provides smooth closure.

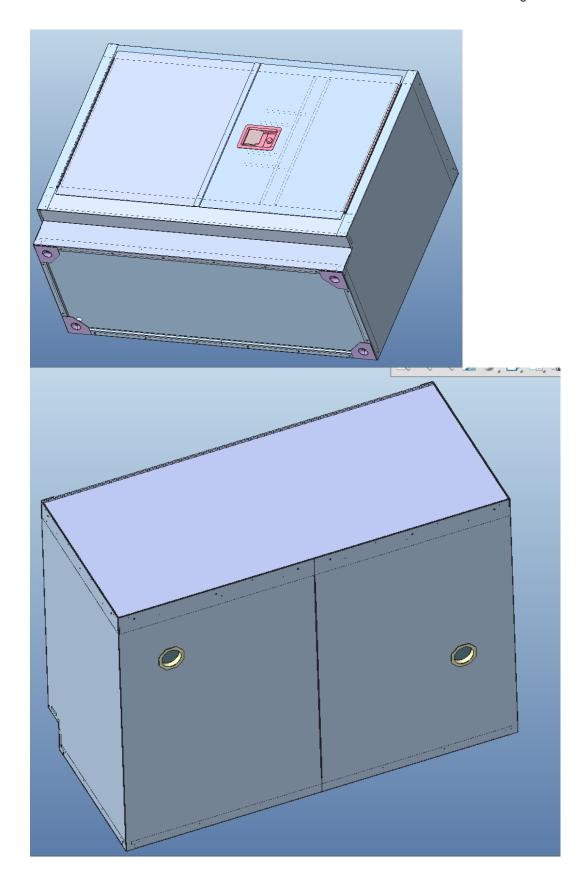
2) PULLS:

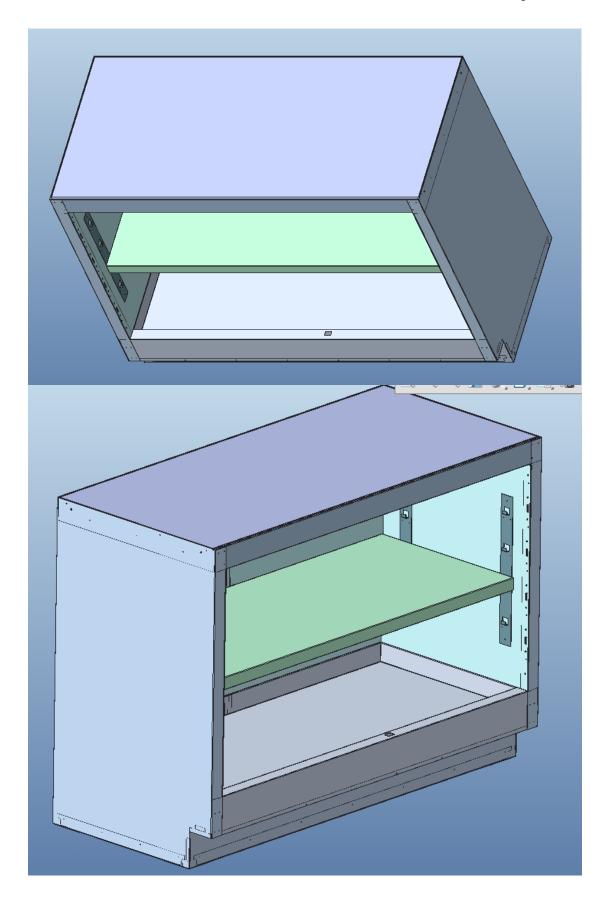
Pulls: Easily secure your contents-U-LOCK handle includes double key set or can be padlocked (not included) for greater security.

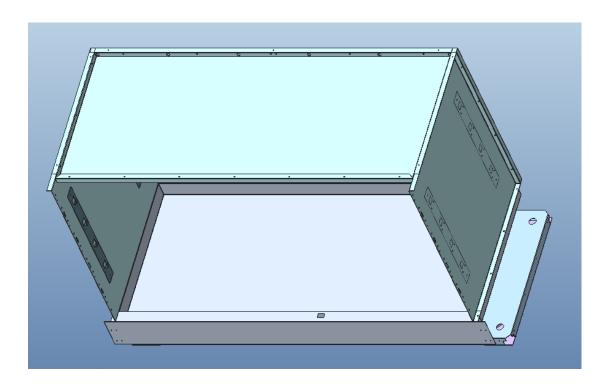
CASEWORK STRUCTURE

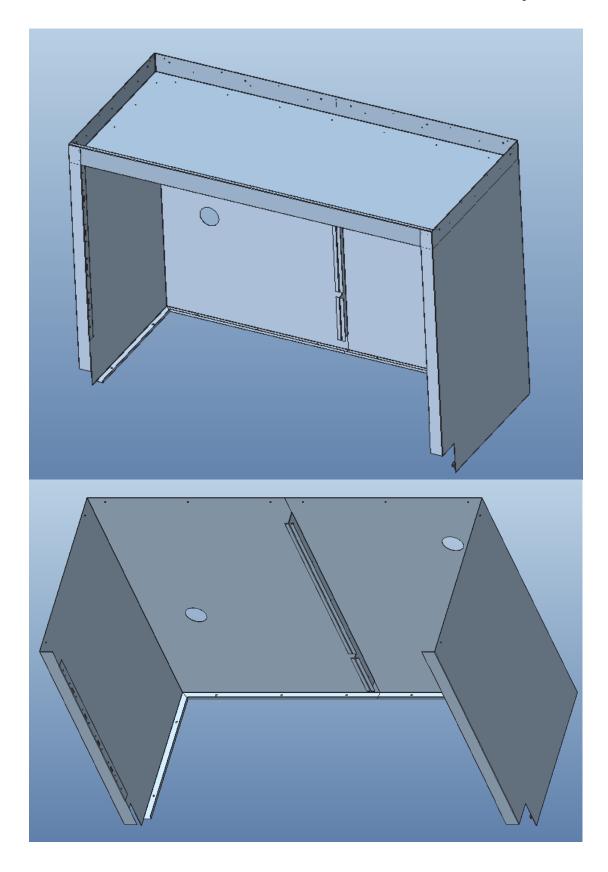


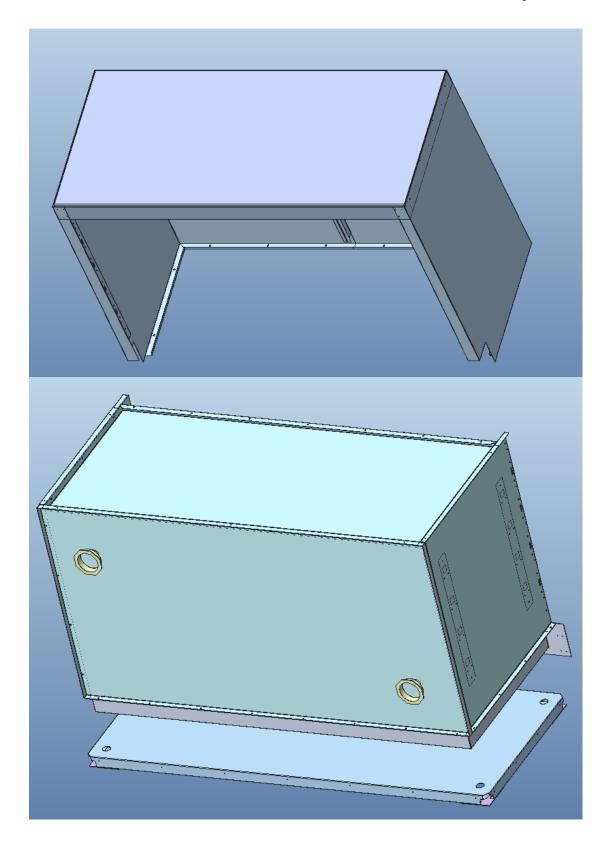


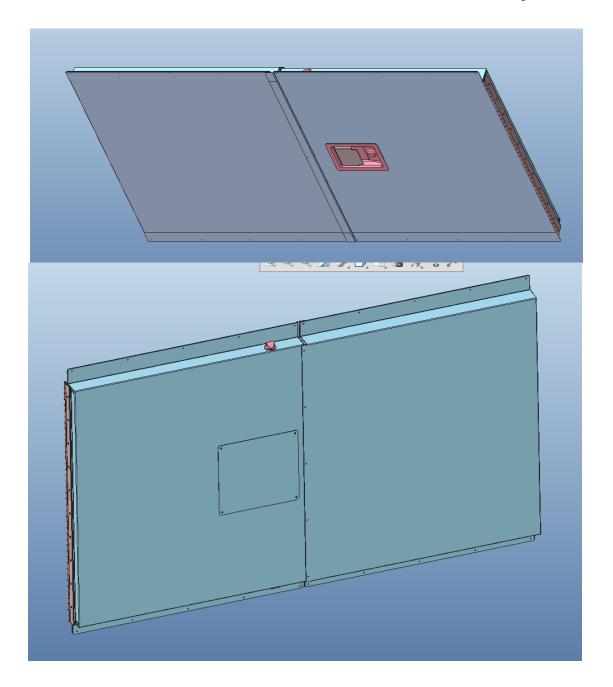












METAL LABORATORY CASEWORK

PART 1-GENERAL

Laboratory casework shall be as specified and shall be compliant with the SEFA8M-2016 standard. Unless otherwise specified, laboratory cabinets shall be constructed of steel and shall be of the modular design type.

PART 2 - PRODUCTS

METALCASEWORK-Acid Cabinet

➤ MINIMUM METAL GAGE:

Steel laboratory furniture components shall be provided of following minimum standard: All the materials for acid cabinet made in thickness cold rolled steel.

> FABRICATION:

- 1) For superior protection against corrosion from drips and off-gassing from harsh chemicals, use acid cabinets. The non-porous, seam-free surface eliminates the need for corrosion-prone rivets or fasteners. It resists staining and cleans up easily.
- 2) Cabinet structure: Made in steel construction, with Reinforcement steel.
- 3) Fully welded, construction holds squareness for longer life and offers greater protection against corrosion from drips.
- 4) Linner Panel: With 5mm thickness PP panel around inside the cabinet.
- 5) BOTTOM: The base unit case bottoms shall be one-piece construction.
- 6) TOE SPACE: Integral toe space on base cabinets is high x deep.
- 7) SHELF: Inside with one shelf made in 8mm thickness PP panel, shelf in 60mm thickness.
- 8) VENTS: Dual vents with built-in flash arresters strategically placed at back side.

> CASEWORK FINISH:

Reagent resistant electrostatically applied epoxy powder coating finish shall be provided on all steel equipment in accordance with the following specifications:

- 1) All metal shall be spray cleaned with a heated cleaner/phosphate solution and pretreated with iron phosphate spray followed by a neutral finish seal prior to application of final finish.
- 2) All treated parts shall be immediately dried in heated ovens and gradually cooled before application of the finish. Treated metal parts shall be clean and properly prepared to provide optimum adhesion of finish and resistance to corrosion.
- 3) Finish for metal equipment shall be a high-grade laboratory furniture quality, chemical resistant baked epoxy powder coat of color selected from the manufacturer's standard colors, electrostatically applied. Powder coating shall be baked in a controlled high temperature continuous oven, assuring uniform curing to a smooth, hard satin finish.
- 4) Durable and chemical-resistant, lead-free powder-coat paint finish, inside and out, retains high gloss look and minimizes the effects of corrosion and humidity.

> CASEWORK HARDWARE AND ACCESSORIES

1) HINGES (METAL): Hinges: Type 304 stainless steel.

2) PULLS:

Pulls: Type 304 Stainless steel.

> CASEWORK STRUCTURE

