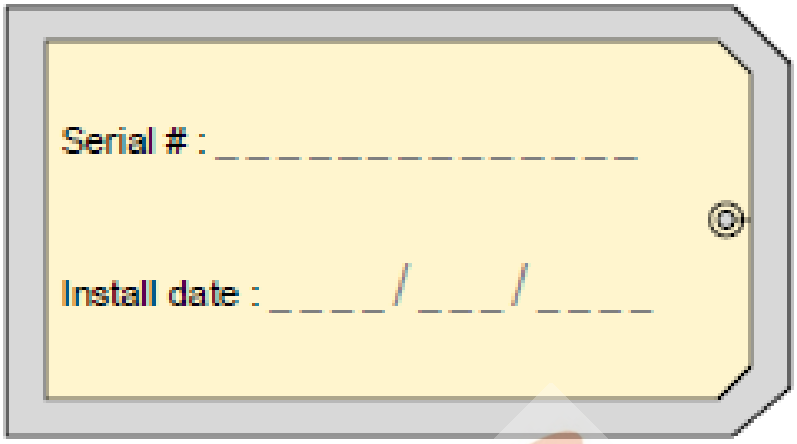
USER MANUAL

BF Series
Down/Back Draft Workstations

BF400, BF450, BF500, BF510, BF550

Rev 10-28-16 ©



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UNPACKING

1) Carefully inspect the exterior of the shipping container before opening. If the crate is damaged and the product has sustained damage, then immediately contact Mopec and the freight carrier. **Never discard the shipping container even if it is damaged beyond recognition.**

2) Have the delivery driver note any suspected damage on the Bill of Lading and sign it. Mopec will help assist in filing a claim for product repair and/or replacement.

3) Carefully open the containers and inspect the equipment for concealed damage. If visible damage is noticed (i.e. broken welds, dented stainless, scratches, etc.) follow through as noted above. Do not discard the shipping material. They are important in settling claims.

CAUTION: There are loose components in the packaging of your product. Be very careful in examining the packaging material as it may contain installation parts and/or product components.

INSPECTION

1) After carefully unpacking your Mopec workstation please inspect the items in the list below prior to installing the unit. The workstation should be thoroughly checked for loose screws, defects, or damage that may have occurred during shipping or packaging.

BF Series Down and Back Draft Workstation Installation Instructions

Locate package of smaller items (dissection board, tissue boxes, or filters)
When removing from the shipping platform, be careful if the unit has a foot pedal. The unit should be removed from the shipping platform as to not cause damage to the copper plumbing attached to the foot pedal

Leveling and Setting Unit in Place

The unit should be off the floor and resting on the leveling pads. The unit should be leveled to ensure proper drainage. This allows water to evaporate or dry in case of a leak without getting trapped by the base of the unit Ensure there is a Minimum of 6.5" from the wall to the back of the unit. This allows for elevating units to move freely without any obstructions to the wall.

Utility Connections

The only connections necessary are the Electric, Cold and Hot water supply, the drain connection and the HVAC connections if in house ventilation. The unit is already pre-wired and plumbed for the options ordered.

Electrical Connection

All electrical, water and ventilation stubs should be prepared in accordance with our rough-in dimensions shown on rough in diagram from your approval process.

The electrical service provided for the MB600 must include:

1) A switch or circuit breaker for each circuit to which the wiring harnesses from the workstation will be connected.

Each BF Series Workstation has a eight-foot line cord with a hospital grade plug. It is possible to order with a 3 foot whip to permanently hard wire the unit to the electrical connection. The whip leads are labeled L1 and C1 for the unit electrical options such as lights and fans if a recirculation unit.

There are three wires:
Black Labeled as L1
White Labeled as C1
Green w Yellow Stripe Ground

Flexible water tight conduit and connections are the preferred conduit and is not provided with the unit. This is due to an unknown length needed and variances possible in the rough in process.

Drain Connection

The BF500, BF510 and BF550 workstations are equipped with 1.5" Diameter drain and connections. DO NOT modify the drain line or connections without contacting MOPEC first. The Units are built in accordance with the rough in drawings specific to the unit. The height is per the rough in drawings provided at the time of the order.

Water Supply Connection

The water supply connections are ½" DIA copper pipe. The unit has been cleared of water and debris during the manufacturing and testing of the unit. The rough in drawing for the unit suggests a 1/4 turn valve to be connected to the wall. This is to allow the water to be localized and disconnected should the need arise to work on plumbing in the future. Before connecting the unit to the facility water supply, check the lines in the facility for debris by flushing the lines for a moment. After the connections are made remove the aerator from the faucet and turn the water on and open the faucet and other water options after the faucet to allow any debris to evacuate the system. This is the time to look for leaks or other plumbing issues. The plumbing is tested for leaks and function at the facility and is put under pressure for 45 minutes to check for leaks. However, the plumbing is hard copper and soldier connections. During transport a unit may experience a failed soldier joint. Contact MOPEC immediately if there is a leak.

Ventilation Connection
Ventilation is one of two types for the BF Workstations; In House Ventilation or Recirculation. For in house the unit is connected to the facility ventilation system via duct work.

In House

BF450 the connection is a 4" x 18" rectangular stub on the top back of your unit. The duct work is not provided by Mopec unless specifically ordered.

MB550 the connection is a 4" x 18" rectangular stub on the top back of your unit. The duct work is not provided by Mopec unless specifically ordered**.**

Recirculation

BF400, BF500 and BF510 the filters will need to be installed. You should have a minimum of 2 inches or more behind the workstation for the filtered air to discharge. Air flow is generated by multiple fans in the recirculation models. They are controlled by a rheostat to control volume/speed.

The ventilation diverter should be placed no more than 15CM (Approx 6" from the front/ Please see the photo below.

The grid plate must be installed with the holes to the back and the finger holes to the front as shown below

The next step is to open filter access door (it the unit is a recirculating air unit) by unlatching both side latches pivoting the access door open and removing filters.

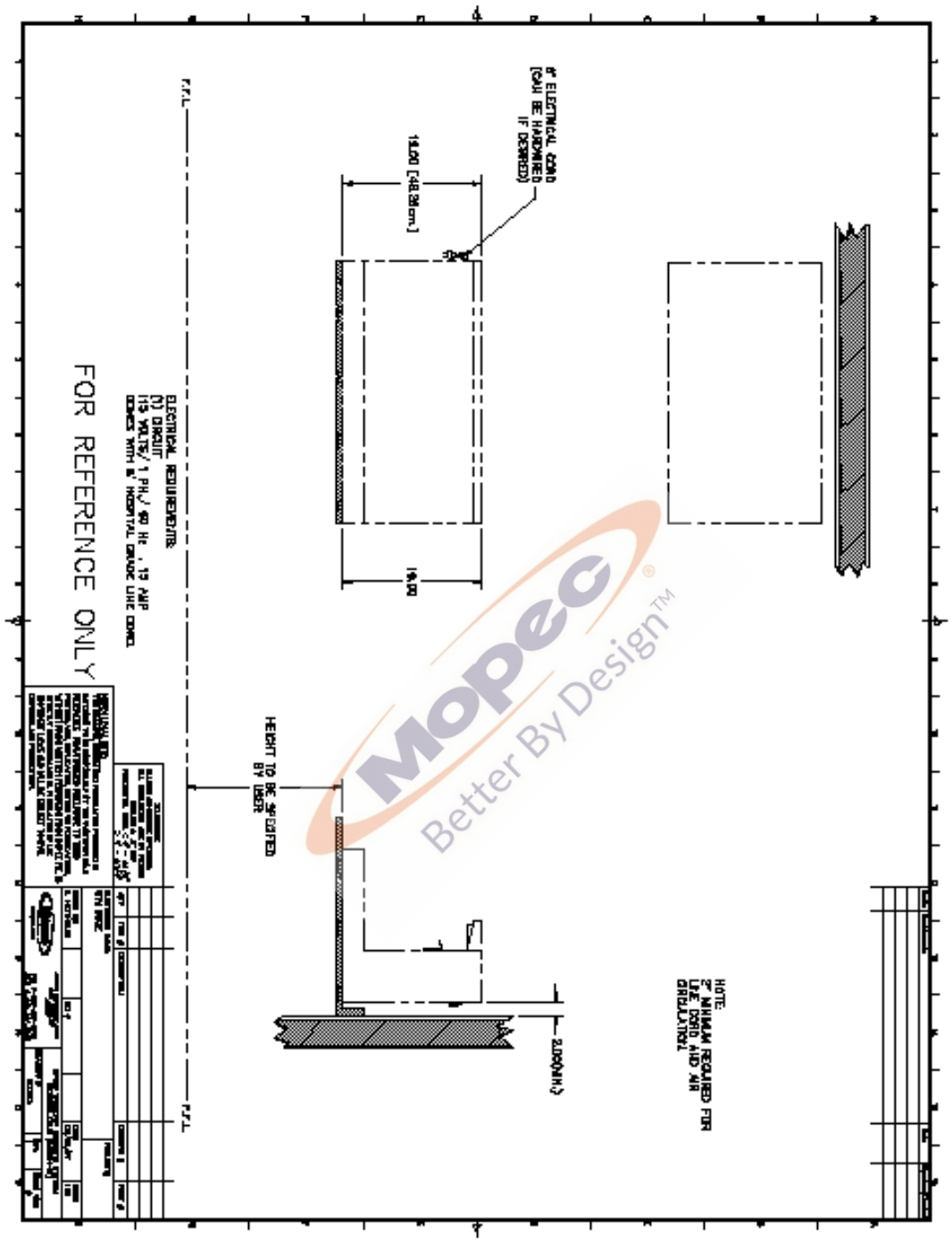
Each filter can be removed simply by pulling it toward you and out of the module. Both the activated charcoal filters are wrapped in plastic and must be removed before installation. You may notice some loose charcoal particles due to transportation which is normal.

Once the plastic is removed slide the filter in the slot and close the door.

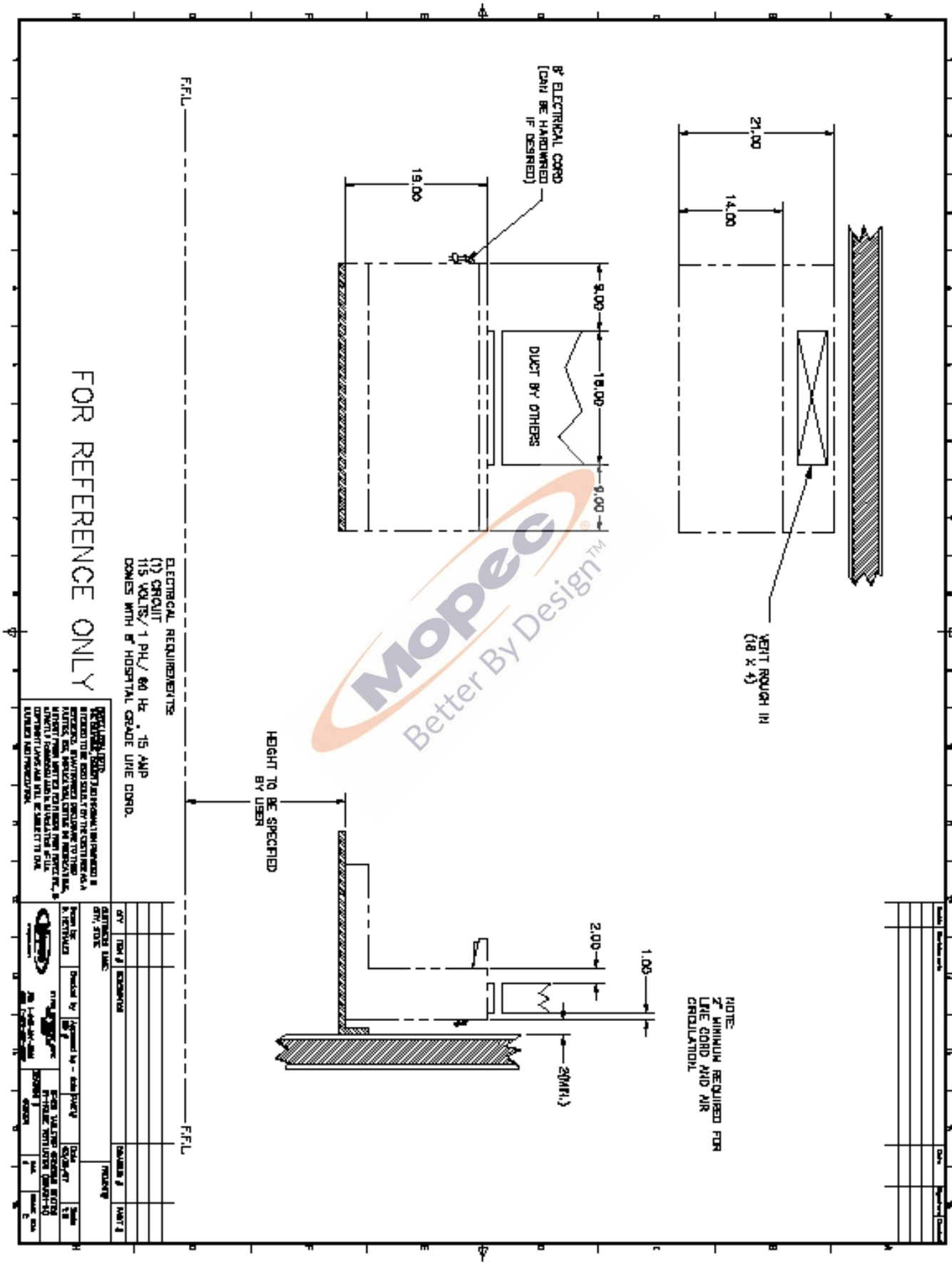
**** Caution ** These are general guidelines and installation is specific for each of the BF Series units. Professional installation is recommended.**

Rough In Drawings

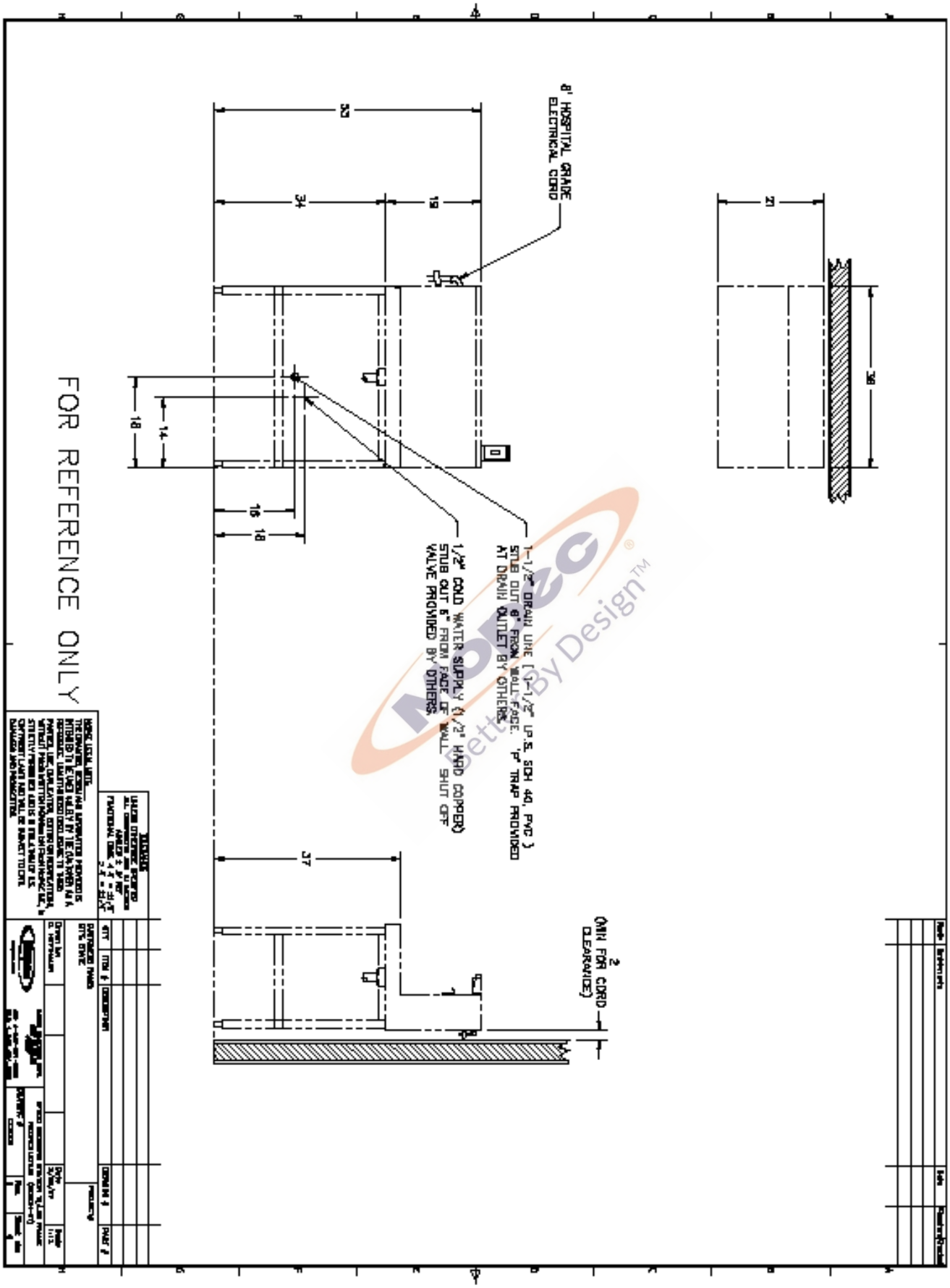
BF400



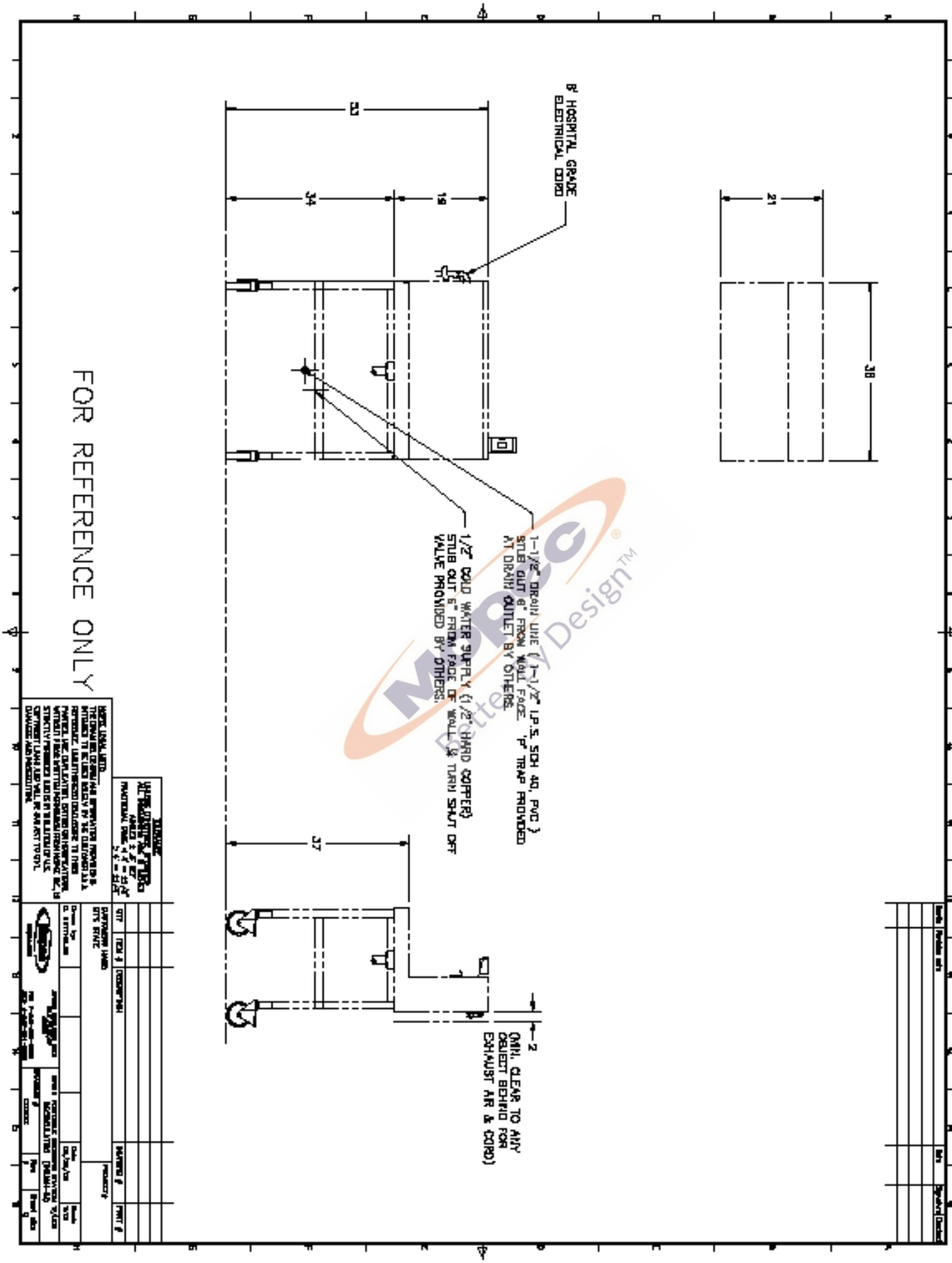
BF450


21.00
14.00
VENT ROUGH IN (18 X 4)
8' ELECTRICAL CORD (CAN BE HARDWIRED IF DESIRED)
19.00
9.00
18.00
9.00
DUCT BY OTHERS
NOTE: 2" MINIMUM REQUIRED FOR LINE CORD AND AIR CIRCULATION.
F.F.L.
HEIGHT TO BE SPECIFIED BY USER
2.00
1.00
2(MIN.)
F.F.L.
FOR REFERENCE ONLY
ELECTRICAL REQUIREMENTS
(1) CIRCUIT
115 VOLTS/ 1 PH./ 60 Hz. - 15 AMP
COMES WITH 8' HOSPITAL GRADE LINE CORD.

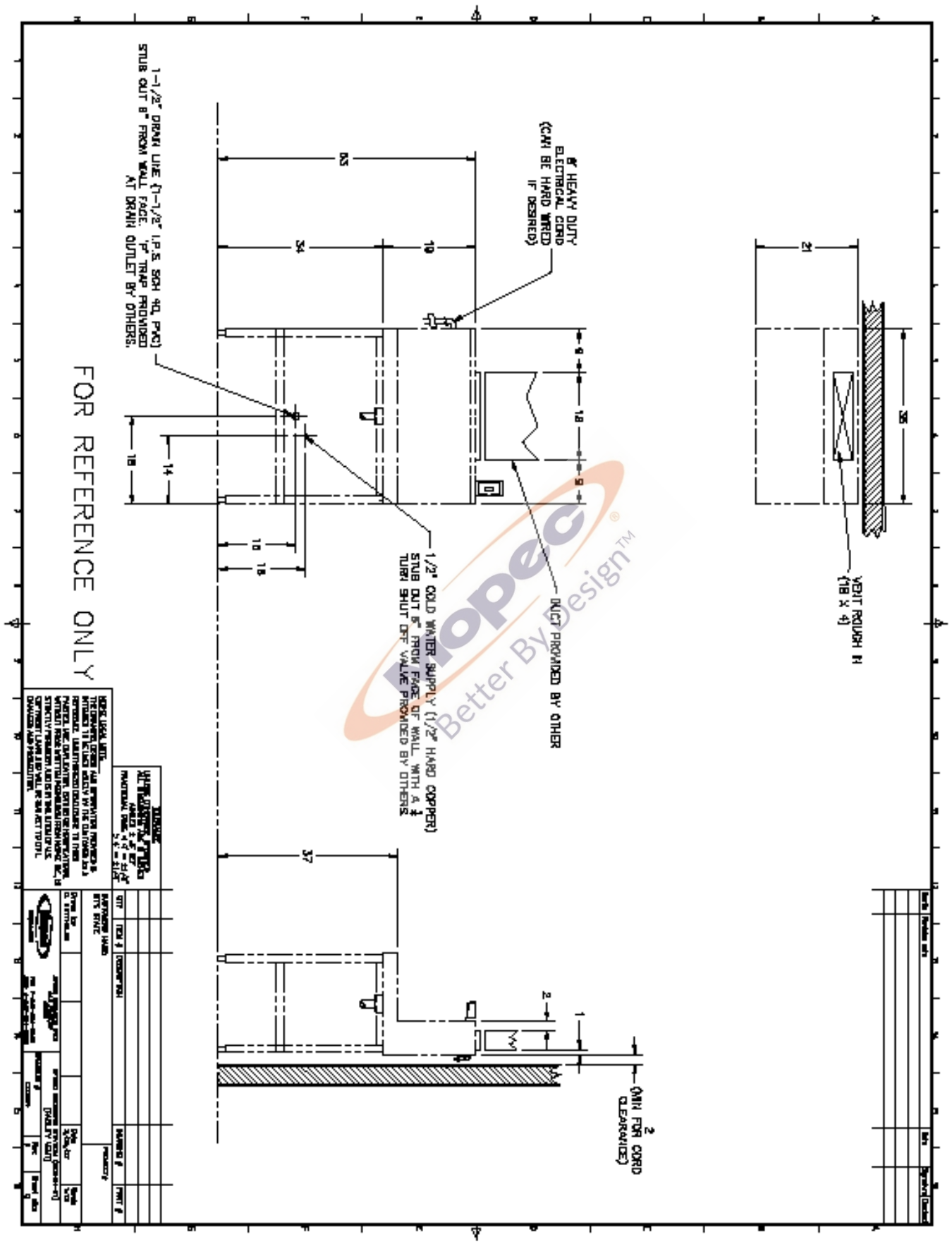
BF500


8' HOSPITAL GRADE ELECTRICAL CORD
1-1/2" DRAIN LINE (1-1/2" I.P.S. SCH 40, PVC) STUB OUT 6" FROM WALL FACE. "P" TRAP PROVIDED AT DRAIN OUTLET BY OTHERS
1/2" COLD WATER SUPPLY (1/2" HARD COPPER) STUB OUT 6" FROM FACE OF WALL VALVE PROVIDED BY OTHERS
2 (MIN FOR CORD CLEARANCE)
FOR REFERENCE ONLY

BF510


8' HOSPITAL GRADE ELECTRICAL CORD
1-1/2" DRAIN LINE (1-1/2" I.P.S. SCH 40 PVC) STUB OUT 6" FROM WALL FACE "P" TRAP PROVIDED AT DRAIN OUTLET BY OTHERS
1/2" COLD WATER SUPPLY (1/2" HARD COPPER) STUB OUT 6" FROM FACE OF WALL W/ TURN SHUT OFF VALVE PROVIDED BY OTHERS
2 (MIN. CLEAR TO ANY OBJECT BEHIND FOR EXHAUST AIR & CORD)
FOR REFERENCE ONLY

BF550


FOR REFERENCE ONLY
8' HEAVY DUTY ELECTRICAL CORD (CAN BE HARD WIRED IF DESIRED)
1-1/2" DRAIN LINE (1-1/2" I.P.S. SCH 40, PVC) STUB OUT 8" FROM WALL FACE. "P" TRAP PROVIDED AT DRAIN OUTLET BY OTHERS.
1/2" COLD WATER SUPPLY (1/2" HARD COPPER) STUB OUT 8" FROM FACE OF WALL WITH A 1/2" TURN SHUT OFF VALVE PROVIDED BY OTHERS
DUCT PROVIDED BY OTHER
VENT ROUGH IN (18 X 4)
MIN FOR CORD CLEARANCE
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INTRODUCTION

The “BF Series of Down and Back Draft Workstations” is a group of compact grossing workstations that are ideal for small surgical procedures. The “BF” family is comprised of the following models:

BF 400 is a compact Countertop Grossing Station utilizing. Recirculating Ventilation System and a large lighted work area.

BF 450 is a compact Countertop Grossing Station utilizing In-house Ventilation System and a large lighted work area.

BF 500 is a Freestanding Grossing Station utilizing. Recirculation Ventilation System, a Hand Spray Rinse System and a large lighted work area.

BF 550 is a Freestanding Grossing Station utilizing In-house Ventilation System, a Hand Spray Rinse System and a large lighted work area.

BF510 is a Portable Grossing Station with a Recirculation Ventilation System, a Hand Spray Rinse System and a large lighted work area.

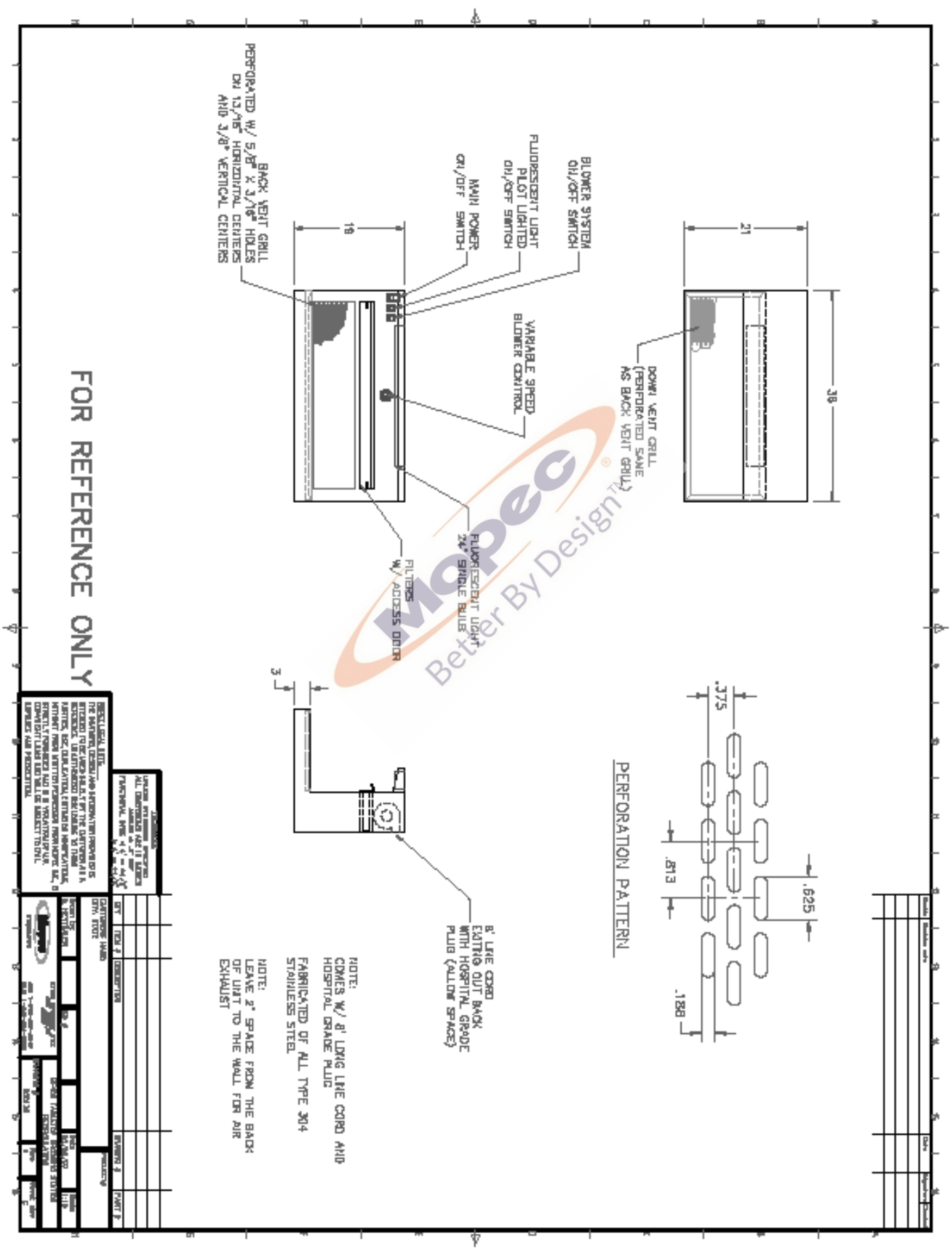
The BF400 and BF500 workstations are designed with a down and back draft ventilated work surface. The design allows air to flow through the grid plate. The BF400 is designed with a catch pan to collect fluids if necessary while the BF500 is freestanding with a built-in drain connection that fluids can flow directly into the drain.

The BF400 is designed to fit onto a standard countertop. The BF500 is free standing complete with drain connection. The BF Series air flow is achieved in one of two ways; the unit can be connected to the ventilation system of the facility or with the built-in fans and filters.

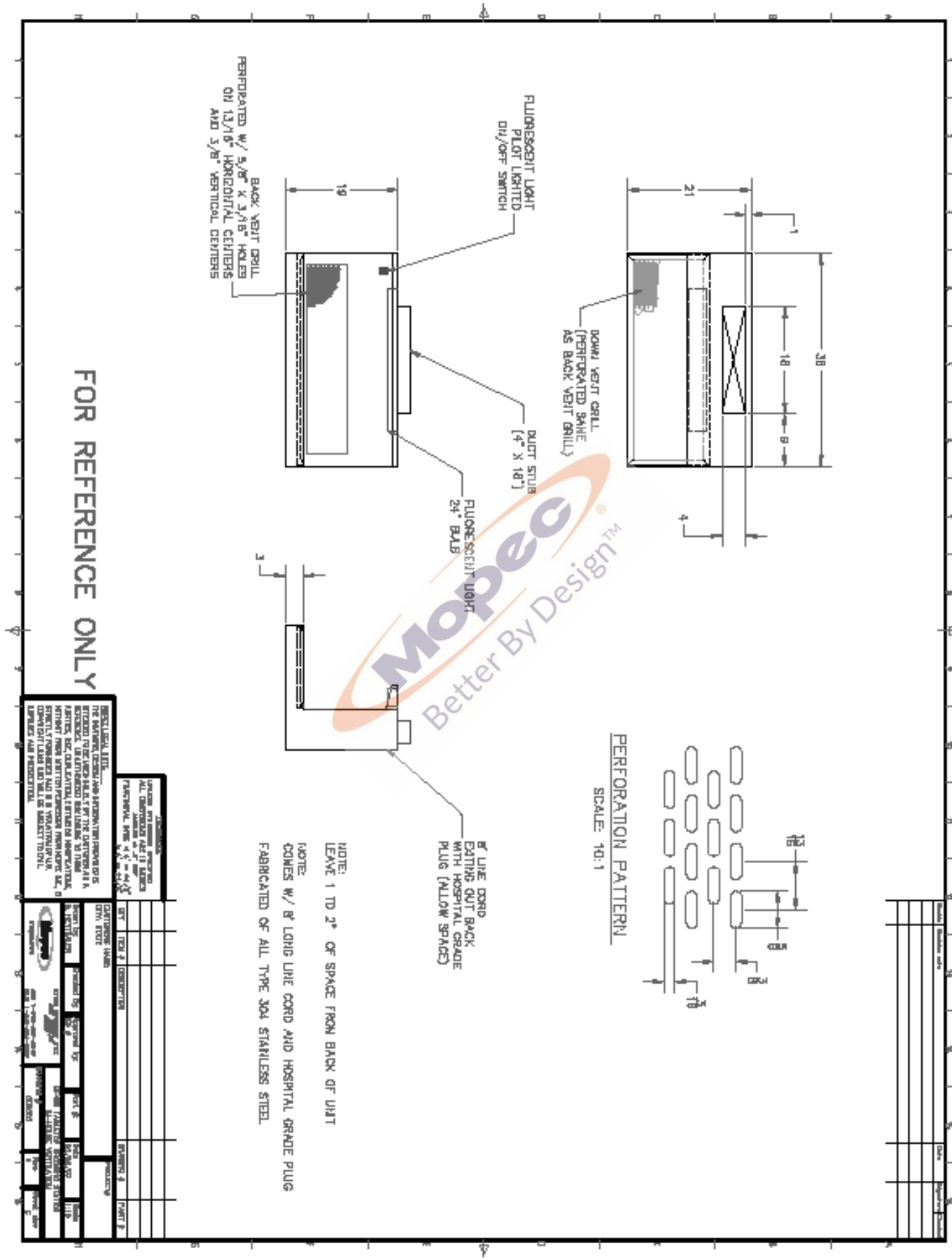
The blower motor must be turned on with the red switch next to the fan speed control. The variable speed fan is operated by turning the control to 100 and turning the knob to the desired speed. This allows the fan to attain its full speed and then adjust to the requested speed.

UNIT DRAWINGS

BF400



BF450


FOR REFERENCE ONLY
PERFORATION PATTERN
SCALE: 10:1
DOWN VENT GRILL (PERFORATED SAME AS BACK VENT GRILL)
FLUORESCENT LIGHT PILOT LIGHTED ON/OFF SWITCH
BACK VENT GRILL PERFORATED W/ 5/16" X 3/16" HOLES ON 13/16" HORIZONTAL CENTERS AND 3/8" VERTICAL CENTERS
OUTLET STUB (4" X 18")
FLUORESCENT LIGHT 24" BULB
8' LINE CORD EXITING OUT BACK WITH HOSPITAL GRADE PLUG (ALLOW SPACE)
NOTE: LEAVE 1 TO 2" OF SPACE FROM BACK OF UNIT
NOTE: CORDS W/ 8' LONG LINE CORD AND HOSPITAL GRADE PLUG
FABRICATED OF ALL TYPE 304 STAINLESS STEEL
38
18
21
19
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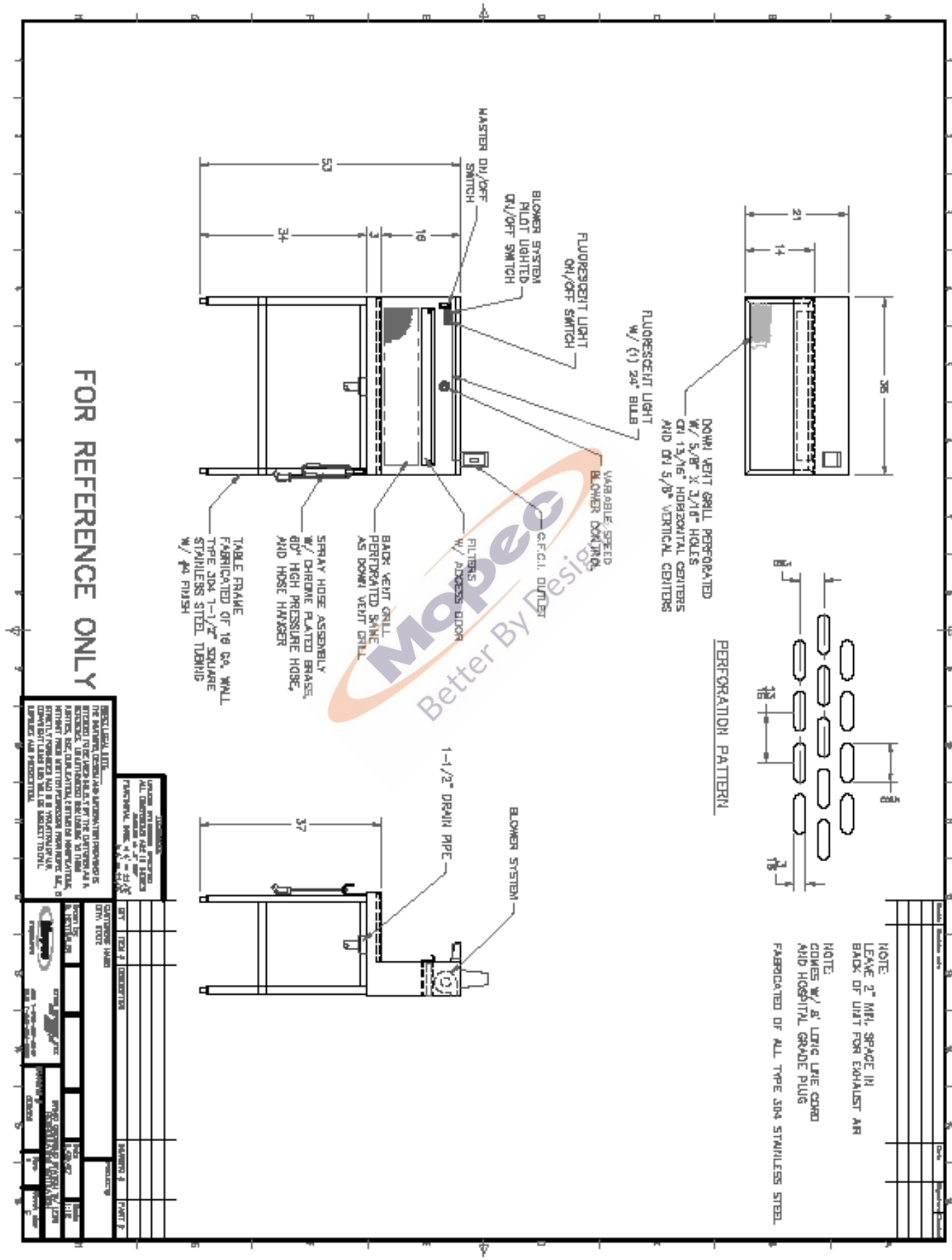
BF500


FOR REFERENCE ONLY
MASTER ON/OFF SWITCH
BLOWER SYSTEM PILOT LIGHTED ON/OFF SWITCH
FLUORESCENT LIGHT ON/OFF SWITCH
FLUORESCENT LIGHT W/ (1) 24" BULB
VARIABLE SPEED BLOWER CONTROL
G.F.C.I. OUTLET
FILTERS W/ ACCESS DOOR
BACK VENT GRILL PERFORATED SAME AS DOWN VENT GRILL
SPRAY HOSE ASSEMBLY W/ CHROME PLATED BRASS 60" HIGH PRESSURE HOSE AND HOSE HANGER
TABLE FRAME FABRICATED OF 18 GA. WALL TYPE 304 1-1/2" SQUARE STAINLESS STEEL TUBING W/ #4 FINISH
DOWN VENT GRILL PERFORATED W/ 5/8" X 3/16" HOLES ON 13/16" HORIZONTAL CENTERS AND ON 5/8" VERTICAL CENTERS
PERFORATION PATTERN
1-1/2" DRAIN PIPE
BLOWER SYSTEM
NOTE: LEAVE 2" MIN. SPACE IN BACK OF UNIT FOR EXHAUST AIR
NOTE: COMES W/ 8' LONG LIFE CORD AND HOSPITAL GRADE PLUG
FABRICATED OF ALL TYPE 304 STAINLESS STEEL
Mopec
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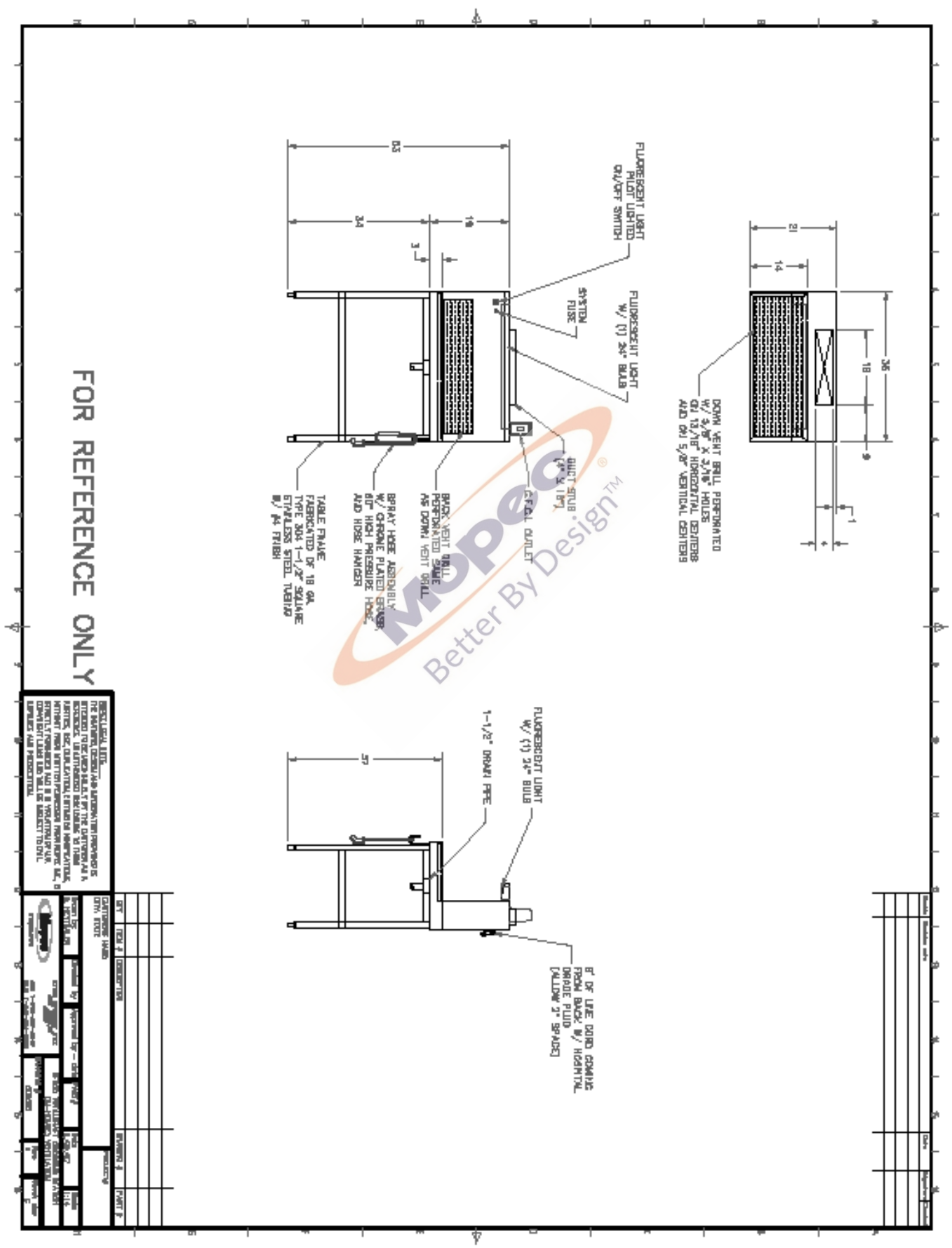
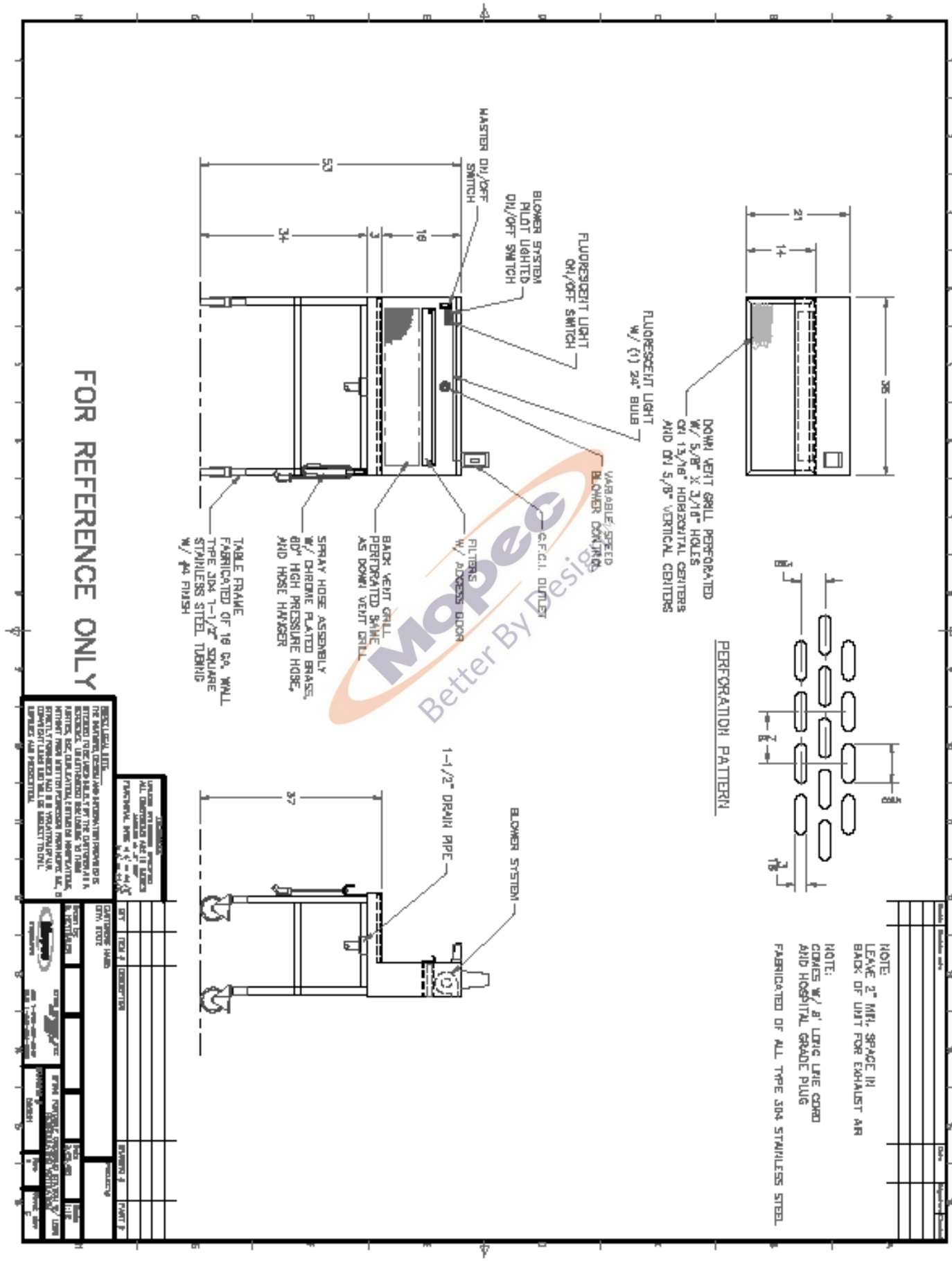
BF510


FOR REFERENCE ONLY
FLUORESCENT LIGHT PILOT LIGHTED ON/OFF SWITCH
FLUORESCENT LIGHT W/ (1) 24" BULB
5X15TEN FUSE
DOWN VENT GRILL PERFORATED W/ 3/8" X 3/16" HOLES ON 13/16" HORIZONTAL CENTERS AND ON 5/8" VERTICAL CENTERS
BACK VENT GRILL PERFORATED SAME AS DOWN VENT GRILL
SPRAY HOSE ASSEMBLY W/ CHROME PLATED BRASS BIB HIGH PRESSURE HOSE AND HOSE HANGER
TABLE FRAME FABRICATED OF 18 GA. TYPE 304 1-1/2" SQUARE STAINLESS STEEL TUBING W/ #4 FINISH
FLUORESCENT LIGHT W/ (1) 24" BULB
1-1/2" DRAIN PIPE
8' OF LIFE CORD COMPLETE FROM BACK W/ HOSPITAL GRADE PLUG (ALLOW 2" SPACE)
Better By Design™

BF550



FEATURES

All units in the **"BF"** family consists of the following:

Work Grid: 18 Gauge, type 304 Stainless Steel with a # 4 Satin Finish
Housing: 18 Gauge, Type 304 Stainless Steel with a # 4 Satin Finish
Work Area: 13" x 34" (33 cm x 86 cm)
Electrical: 115 v / 1ph / 60 Hz Current Draw: 20 Amp maximum
Power: 8' (274 cm) Hospital Grade Line Cord 115 v / 1ph / 60 Hz
Lights: 18" Standard Fluorescent Replacement Bulb with Pilot Lighted on/off Switch
All units have Perforated Back Vent Grill
Perforated Downdraft Grid Plate
Circuit Breaker Switch

Unique features by unit consist of the following:

BF400

Fan System: Dual Exhaust Blowers, 300 CFM. Both blower's velocity is adjustable speed, controlled by a rheostat.

Filters: 7" W x 14" L x 1" (183 cm x 35 cm x 2.5 cm) Front Access
(Fine Particle Activated Charcoal Media or Potassium Permanganate)
Storage Shelf: Top shelf is 12" W x 35" L (30 cm x 91 cm)

BF500

Fan System: Dual Exhaust Blowers, 300 CFM. Both blower's velocity is adjustable speed, controlled by a rheostat.

Filters: 7" W x 14" L x 1" (183 cm x 35 cm x 2.5 cm) Front Access
(Fine Particle Activated Charcoal Media or Potassium Permanganate)
Storage Shelf: Top shelf is 12" W x 35" L (30 cm x 91 cm)
Top Mounted water tight G.F.C.I. Outlet
Hand Spray: 60" (152 cm) high pressure hose Drain Pipe for easy hook-up

BF550

Storage Shelf: Top shelf is 12" W x 35" L (30 cm x 91 cm)
Top Mounted water tight G.F.C.I. Outlet
Hand Spray: 60" (152 cm) high pressure hose. Drain Pipe for easy hook-up

BF510

Fan System: Dual Exhaust Blowers, 300 CFM. One blower is constant velocity and the other is adjustable speed, controlled by a rheostat.

Filters: 7" W x 14" L x 1" (183 cm x 35 cm x 2.5 cm) Front Access
(Fine Particle Activated Charcoal Media or Potassium Permanganate)
Storage Shelf: Top shelf is 12" W x 35" L (30 cm x 91 cm)
Top Mounted water tight G.F.C.I. Outlet
Hand Spray: 60" (152 cm) high pressure hose. Drain Pipe for easy hook-up

Chrome plated brass hand sprayer with soft spray & 60" Long high pressure hose for easy and controlled rinsing of work surface. The water pressure is regulated by the deck mounted valve. Press the lever on the spray head to utilize the spray rinse.
Hand Spray Rinse Video Link

AIR HANDLING

BF Series Back and Down Draft Workstation Design Parameters:
The BF Series Workstations are designed with the basis of fulfilling one goal and that is to adequately ventilate the work surface. An adverse effect of ventilation is noise that has been considered but does not govern the ultimate design criteria. Our design criteria are the most stringent utilizing exerts as outlined from "Industrial Ventilation" by Committee on Industrial Ventilation and Escape Velocity Parameters. Design data is unfortunately based on the table as a completely flooded vat of formaldehyde. Ideal conditions in a grossing environment obviously do not warrant such a large amount of formaldehyde, yet concentration levels are on a higher extreme regarding design data parameters available. Therefore, assumptions are made regarding grossing practices and ultimately formaldehyde concentrations. Two (2) blowers are supplied with the BF400, BF500 and BF510 are designed with an adjustable control to regulate the speed and consequentially the airflow. The BF450 and BF550 workstations are in house ventilation and do not have blowers or filters With all the above considered, below is a chart of actual ventilation parameters for MB Series Grossing Workstations along with their respective definitions:

Identification Description Ventilation Volume
System Requirements
BF400 Down and Backdraft workstation Re-circulating 300 cfm
BF450 Down and Backdraft Workstation In-House 300 cfm
BF500 Down and Backdraft workstation Re-circulating 300 cfm
BF510 Down and Backdraft workstation Re-circulating 300 cfm
BF550 Down and Backdraft Workstation In-House 300 cfm

a Re-circulating (Self-contained exhaust Systems): This system is simply a self-contained exhaust system provide with the Workstation. Air is ventilated through the exhaust grill and circulated through potassium permanganate filters and exhausted out the back of the Grossing Workstation. The exhaust fans are internal and are provided.

The grill for the MB600 is 8" high at an angle of 60 Degrees and 48" Long with (994) 3/16" x 5/8" holes.
The vent grill is perforated with 3/16" x 5/8" slots on 13/16" x 3/8" staggered centers, yielding a 30% open area.

b Both specifications for Fan 1 and Fan 2 are "Free Air" cfm.

When connected to the building ventilation system, volumetric flow rates should be adjustable and be between 300 and 350 CFM (Cubic Feet per Minute. This variable will allow the user a means of adjusting the airflow to their comfort level and work conditions. Calculations are based on 125 LFM (Linear Feet per Minute) face velocity through the grid plates. It should be noted that the working environment is totally open therefore existing room conditions and air currents have a serious effect on the efficiency of the ventilation.

The design parameters for the BF Series Workstations are suggested ventilation requirements and are based on stringent ventilation requirements and ideal conditions. Personalized conditions and practices may warrant an increase or decrease of the ventilation

GOOD PRACTICE WILL OPTIMIZE OUR PROTECTION:
1. Never block the ventilation grill.
2. Placing open containers as close to the exhaust grill as possible, yet never blocking the ventilation grill.
3. Grossing should be accomplished as close to the exhaust grill as possible.
4. Strategically locate the Grossing Station away from room air currents.
5. Practice complete rinsing of residual formaldehyde with hand held spray.

Although the Mopec Grossing Workstation can be the answer to formaldehyde exposure, Mopec cannot assume responsibility of exposure since good laboratory practices and room conditions are beyond Mopec's control.

EVALUATING FILTERS FOR REPLACEMENT

The filters in your MB unit contain alumina pellets impregnated with potassium permanganate, $KMnO_4$, which is a fast oxidizer. Formaldehyde passing through the filter is converted to carbon dioxide and water. **The filter's life depends entirely on the amount of formaldehyde fumes passing through the filter.**

The pellets are bright purple when new and become dark brown when spent. Once the inner part of the pellet is brown it is totally spent and must be replaced.

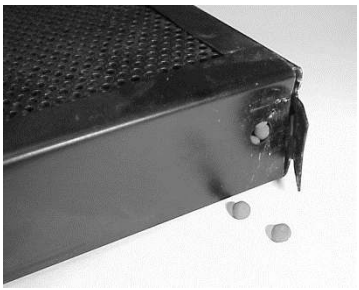
This chemistry is very effective and essentially removes all formaldehyde as long as there is active $KMnO_4$ available. The efficiency drops off as the filter media approaches its maximum capacity. The last 15-20% capacity will exhibit some pass through of formaldehyde.

Health Hazard Data - Alumina Permanganate Filter Media

Effects of Exposure – The filter media is non-toxic upon oral, skin, and inhalation exposure and is non-irritant of the skin. Breathing of dust may cause sneezing. Skin may feel dry after contact. The filter media is an eye irritant.

PROCEDURE - EVALUATING FILTERS FOR REPLACEMENT

One side of the filter will have a small tab which can be opened just enough to allow one or two pellets to be removed. (See photo)



To determine when the $KMnO_4$ has been exhausted, remove a pellet and slice it in half.

Eye protection is recommended based on the above "Health Hazard Data".

The usefulness of the filter is approximately 80% diminished when the purple color first disappears from the core.

The filter saturation rate depends on hours of operation and fumes to be filtered. Instructions on how to change and check the saturation of the filters

Place the sliced pellet(s) on a paper towel and add a few drops of water. The water running off the pellet(s) should be initially purple and then turn a deep iodine color. If no purple coloration is present, the $KMnO_4$ (Potassium Permanganate) material is totally spent.

When the purple color first disappears from the core of the pellet as described above, the rate at which formaldehyde is removed from the air stream is slowed considerably.

(See Summary on Following Page)

PROCEDURE – SUMMARY OF EVALUATING FILTERS FOR REPLACEMENT

From a practical standpoint, it may be desirable to perform the tests on the preceding page more frequently during initial usage of the filters to determine when the purple first begins to disappear from the core of the sliced pellet. Based on these early observations, the user can establish a Replacement Testing Cycle with occasional re-checks for verification. Filter Evaluation Video Link

The filter saturation rate depends on hours of operation and fumes to be filtered. Instructions on how to change and check the saturation of the filters are shown in the following links

Dispose of contaminated filters in accordance with your facility, state and federal procedures for hazardous materials disposal. See the SDS for the chemicals exposed to the filters for directions.

STAINLESS STEEL CARE AND MAINTENANCE

To maintain your stainless-steel product, follow these four steps:

1) **Never, ever use wire brushes, Brillo, steel wool or abrasive cleansers (like Ajax or Comet).** If something needs to be aggressively cleaned only use a Scotch-brite pad or similar product and only scour with the "grain" of the stainless. As an example, please reference the photo on page 2 of this document. A very abrasive product was used in an area on the unit and that did not follow the grain of the stainless. The effects of this scratching may diminish over time with proper care but the effects of this scouring are obvious. (The use of the Scotch-brite Pad following the grain over time may help scratches such as this). Depending on the surface finish of your stainless steel, abrasive cleaners can cause scratching. Duller finishes probably won't show scratching as much as mirror or highly polished finishes. When in doubt, test in a hidden spot, and work from the least risky type of cleaning, (i.e. water) to the heavy-duty stuff.
Do not use cleaners containing chlorine. While it may be second nature to bleach everything, stainless steel and chlorine do not mix well. Do not use bleach when cleaning stainless steel. Do not allow bleach or bleach water to sit for long periods. Bleach can eventually cause staining and pitting. Bleach stains are removed with stainless steel cleaning polish.

2) **Keep the surface clean of grime, tissue and particulates.** This can be accomplished by using the "Water Hand Spray Rinse" and use of cleaning products.

3) **Rinse the surface after using disinfectant.** In Pathology and other medical areas, the act of disinfecting is desired. There are several ways to do this including using Mopec's Bench Spray & Wipe Disinfectant. Labs use any number of different products including 10% bleach or other disinfectant sprays and wipes. For the most part, each one of these has high salt contents and lower PH levels to aid with disinfection. Most disinfectants must be followed up with a water rinse to remove the salts that remain after these products dry. We advise to always follow up a disinfection cleaning with a thorough rinse of water. We advise not to use diluted bleach, if you must; we stress the importance of a thorough rinse of water after use. If not rinsed properly, these salts can become visible after the disinfectant dries. They can appear with a whitish characteristic or contain light lines of white with a grainy feel when you wipe your hand across the work surface. If these residues are not removed with a thorough water rinse and wipe down, they will accumulate and eventually degrade the appearance and integrity of your stainless surface. Rust is a long-term possibility if salts can remain on the work surfaces over time. Gritty, dirty water or residue from cleaning solutions left on a stainless-steel surface can stain or damage the finish.

4) **All stainless-steel products should be protected by a polish.** As a prime example before any product leaves Mopec it is coated with WD-40 as a protecting coating for the stainless. Mopec offers a Stainless-Steel Cleaner and Polish in both wipe and spray. These Mopec products will not only deep clean your stainless but will also protect their finish from chemical, low PH and salt and keep the finish looking like new.

Decal

Mopec advises that if the technicians are not taking the proper precautions when using the Decal solution, the possibility of two things will occur, a brown or rust ring where the Decal resides along with a milky white substance on the surface. (As an example, reference the below photos to see the rust rings.) Decal is very harsh, even the fumes can and will cause staining on stainless steel. One thing that you might want to consider doing is to place the Decal container you currently use inside a plastic base that will help catch drips that might occur. Clean and rinse your station after every use of Decal solution.

Rust

Rust can and will occur on stainless if it is not maintained properly. The most common cause of rust is from using metal or stainless racks that are not made of 304 stainless. This is referred to as "transfer rust". Leaving of salts from cleaners or disinfectants can and will lead to possible rust areas in the long term. Always rinse all disinfectants before they dry. Decal solutions and even fumes are very aggressive and can cause rust if not cleaned up and used properly around stainless. Formalin use has not been shown to cause rust in any way.

Conclusions & Suggestions

We are confident and can assure you that if you institute the suggestions detailed above that your Mopec Grossing station will look as it did the day it arrived.

Do not assume it's the cleaner. If you do have some spotting or staining, and you've followed all the suggestions, it may not be the cleaner. Water, especially hard water, can leave spotting and staining on stainless steel surfaces. Hard water can leave mineral deposits, resulting in whitish-colored spots and streaks. Remove hard water stains with vinegar or with stainless steel cleaning polish. Prevent hard water stains by towel-drying after every wash. Do not allow soaps and cleaners to dry on surfaces. The chemicals in many soaps and cleaners can cause staining. Never use corrosive cleaners such as mineral spirits. Use stainless steel cleaning polish and a non-abrasive scrub pad to remove dried cleaner stains. Baking soda mixed with liquid dish soap can make a good paste to gently rub on stains. Be sure to rinse the stainless-steel surface thoroughly, and towel dry. If stains remain Mopec recommends trying a stainless steel cleaner and polisher. Barkeeper's Friend is a good powder formula that can clean without scratching. Be sure to follow the directions, rinse thoroughly, and towel dry. These methods should help remove any discoloration.

Fingerprints and Stains – The most common surface contaminates that occur from normal use are fingerprints and mild stains. These usually affect only appearance so fortunately they do not influence corrosion resistance. They can easily be removed by a variety of simple cleaning methods. The most troublesome marks to remove from the surface of smooth polished or bright finished stainless steel are fingerprints; fortunately, they can be removed with a common glass cleaner or by gently rubbing with a paste of soda ash (sodium carbonate) and water which would be applied with a soft cloth. Again, it is best to follow with a warm water rinse.

Clean Water and Wipe – The method that will do an adequate job and is the simplest, safest and the least costly is the best method. There is no surface coating to wear off stainless steels so the surface will thrive with frequent cleaning. The first choice to clean mild stains and loose dirt and soil should always be a soft cloth and clean, warm water. Rinsing with clean water and wiping the surface dry will finish the process and eliminate the possibility of water stains.

Solvent Cleaning – To remove oils, greases and fresh fingerprints that have not had time to oxidize or decompose, use a solvent that does not contain chlorine. There are many organic cleaners on the market today that optimize safety attributes and clean ability. Spray or vapor methods or by wiping with clothes containing solvents can also clean surfaces. The wiping technique will sometimes leave the surface streaked.

Scratch Repair

A surface scratch can be repaired using the following technique. Completely removing the scratch will depend on how severe it is. Use 120 grit emery cloth or paper and firm pressure to sand the scratch. Sanding must always go in the direction of the grain. Sand in a perfectly straight line, avoiding the natural tendency to sand in an arc. Sand the surface until the scratch is gone. Polish using a very fine grade of 3M scotch-brite pads. Use the same motions as with sanding. Polish the surface until the original finish is restored.

For stubborn spots, stains, light discoloration, water marking or light rust staining use a mild, non-scratching cream or polish. Apply with soft cloth or soft sponge and rinse off residues with clean water and dry. Avoid cleaning pastes with abrasive additions. Suitable cream cleansers are available with soft calcium carbonate additions, or with the addition of citric acid. Do not use chloride or acidic solutions Nylon abrasive pads should be adequate for dealing with most

deposits (DO NOT USE STEEL WOOL OR BRILLO PADS). If a more severe treatment is needed to mask coarse scratches or physical damage on a surface, use the finest abrasive medium consistent with covering the damage marks. With directional brushed and polished finishes, align and blend the new "scratch pattern" with the original finish, checking that the resulting finish is aesthetically acceptable. Silicon carbide media may be used, especially for the final stages of finishing. Avoid using hard objects such as knife blades and certain abrasive/souring agents as it is possible to introduce surface scuffs and scratches. Scratching is particularly noticeable on sink drainer areas. These are usually superficial and can be removed with proprietary stainless steel cleaners or, alternatively, with a car paint restorer, such as 'T-cut'. Rust marks or staining on stainless steels is unlikely to be the result of corrosion to the stainless steel itself (similar marks may also be found on porcelain and plastic sinks). These marks are likely to result from small particles of carbon steel from wire wool.

USER PARTS

Replacement parts are available from Mopec They can be ordered by contacting Mopec at 800-362-8491.

POTASSIUM PERMANGANATE FILTER	BF007	Dimensions: 14" (35cm) L x 7" (17cm) W x 1" (2.54cm) H
ACTIVATED CARBON FILTERS	BF008	Dimensions: 14" (35cm) L x 7" (17cm) W x 1" (2.54cm) H

PREVENTITIVE MAINTENANCE CHECKS

Procedure:

1. Visually check the exterior of equipment for any signs of damage.
2. Visually check the condition of the power cord and plug(s) for cracks, cuts, bare or broken wires and signs of excessive heat (discoloration).
3. Visually inspect electronics for signs of damage and/or overheating.
4. Ensure all the receptacles and covers are operating properly (testing GFCI).
5. Verify correct operation of unit including all controls, buttons, displays and indicators when applicable.
6. View under the leg frame to ensure no leaks, dry rotted hoses, or electrical issues under the table.
7. Check all water fixtures.
8. Clean exterior of unit.
9. Complete paper work of inspection and file in appropriate file for future reference. Complete and affix an inspection sticker, when applicable.
10. Return the unit to service.

LIMITED WARRANTY

Products manufactured by Mopec will be free from defects in material and workmanship and conform to Mopec's description or specifications. If a warranty claim is made within one (1) year from the earlier if the date of acceptance/first beneficial use, the defective or nonconforming Product or Part thereof will be repaired or (at Mopec's option) replaced free of charge, FCA Mopec's dock. All warranty claims must be in writing and received by Mopec within the warranty period. The warranty is not transferable (other than to customers of Mopec's authorized Distributors), and will not apply unless the Equipment has been properly installed, maintained and operated in accordance with all instructions; and does not apply to defects, nonconformities or other failure due to Equipment misuse, abuse, modifications, or other causes outside Mopec's control. If a warranty claim is made in writing within the warranty period, the defective or nonconforming Equipment (or Part thereof) will be repaired or (at Mopec's option) replaced free of charge, FCA Mopec's dock.

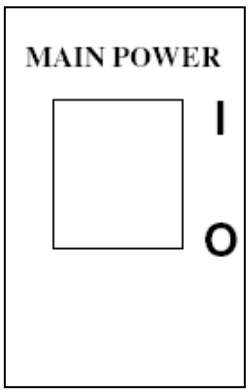
THERE ARE NO WARRANTIES WHICH EXTEND BEYOND THE DESCRIPTION ON THE FACE HEREOF. THE WARRANTY AS SET FORTH HEREIN IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

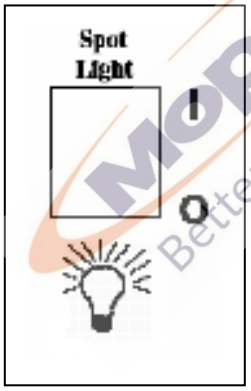
To the extent that Mopec is acting as a supplier of Products manufactured by a third party, the Products will be warranted only to the extent that they are warranted by their manufacturers and Buyer (or its customer) agrees to look solely to the Product manufacturer for all warranty claims.

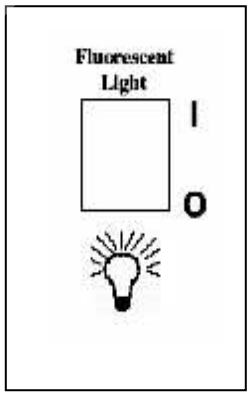
MOPEC, 21750 COOLIDGE HIGHWAY, OAK PARK, MI 48237

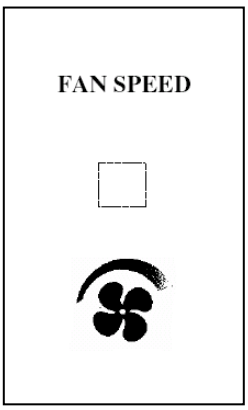
BEFORE SERVICING THE UNIT LOOK FOR AND HEED THE FOLLOWING LABEL

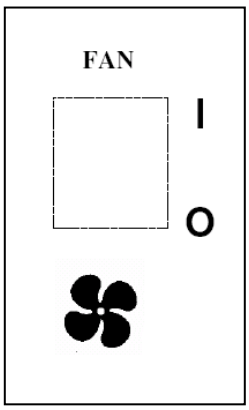
Symbols that may be found on the Equipment





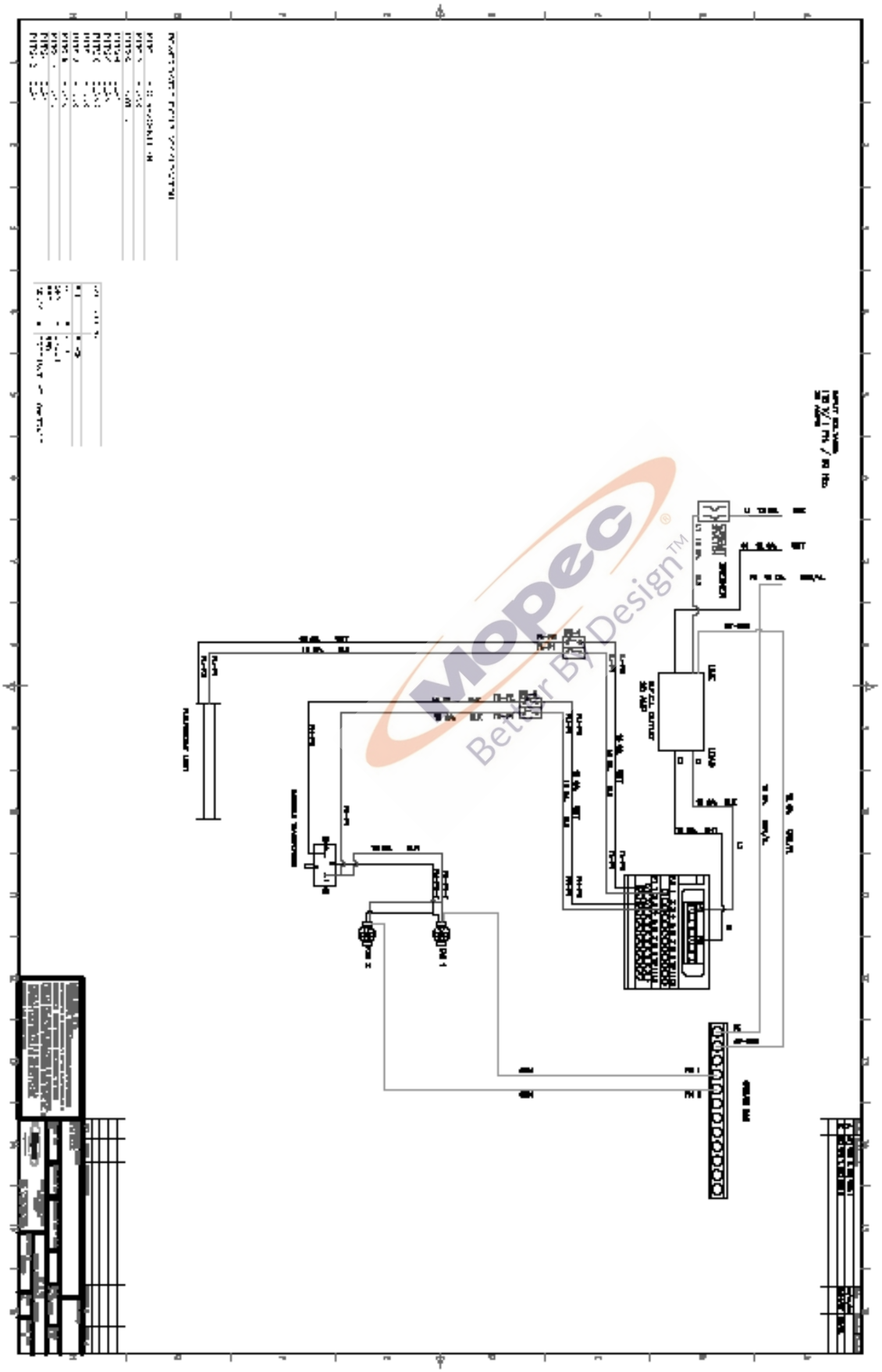






Problem	**Possible Solution**
My Unit does not turn on	Assure your facility circuit breaker has not been tripped. Assure the G.F.C.I. has not been tripped (off) – Reset to on.
y hand spray does not work	Assure the water valve from your facility is on. Assure the concealed shut off valves to the hand spray are on. Assure hose is not kinked.
My lights do not work	Assure your facility circuit breaker has not been tripped. Assure unit is plugged in. Assure the G.F.C.I. has not been tripped (off) – Reset to on. Assure Master Switch is turned on – Switch is lighted when on. Assure light switch is on.
My unit does not remove odors	Assure your facility circuit breaker has not been tripped. Assure unit is plugged in. Assure the G.F.C.I. has not been tripped (off) – Reset to on. Assure Master Switch is turned on – Switch is lighted when on. Assure Fan Switch is on. Turn up fan speed. Assure plastic wrap is removed from filters. Assure filters are in place. Assure filters are not clogged or contaminated

ELECTRICAL DIAGRAM



CERTIFICATE OF REGISTRATION

This is to certify that

MP Acquisition, LLC DBA Mopec

21750 Coolidge Highway, Oak Park, Michigan 48237 USA

operates a

Quality Management System

which complies with the requirements of

ISO 9001:2008

for the following scope of registration

The registration covers the quality management system for the design, engineering, manufacturing and installation of equipment and distribution of supplies for morgue, pathology, histology and necropsy applications.

Certificate No.:	CERT-0078089	Original Certification Date:	April 9, 2008
File No.:	1068177	Current Certification Date:	April 7, 2014
Issue Date:	March 11, 2014	Certificate Expiry Date:	April 6, 2017

Chris Jouppi
President,
QMI-SAI Canada Limited

Samer Chaouk
Head of Policy, Risk and Certification

ISO 9001

Certificate

TÜV

Certificate no. CU 72041125 01

License Holder:
Mopec, Inc.
21750 Coolidge Hwy
Oak Park MI 48237
USA

Manufacturing Plant:
Mopec, Inc.
21750 Coolidge Hwy
Oak Park MI 48237
USA

Test report no.: USA-GB 30471065 001 **Client Reference:** Rick Bell

Tested to: UL 61010-1:2004
CAN/CSA-C22.2 61010-1:2004
NFPA 79:2002

Certified Product: Grossing Station **License Fee - Units**

Model Designation: MMBXXXX 7
(X= 0-9, A-Z, = not safety-relevant)

Rated Voltage: AC 115V, 60Hz
Rated Current: 20A
Protection Class: I

Special Remarks: To be installed according to the licensee's installation instructions.

7

Appendix: 1

Licensed Test mark:

TUV Rheinland of North America, Inc. C US

Signatures

Stephan Schmitt
President

Dipl.-Ing. M. Raap
QA Certification Officer

Date of Issue (day/mo/yr)
04/02/2005

TUV Rheinland of North America, Inc., 12 Commerce Road, Newtown, CT 06470, Tel (203) 426-0888 Fax (203) 426-4009

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