

CUSTOMER: _____

REFERENCE: _____

GETINGE

8668 Washer/Disinfecter

PRODUCT SPECIFICATION

PRODUCT

The Getinge 8668 are fully automatic, microprocessor controlled mechanical washers. The 8668 effectively clean, thermal disinfect and dry, moisture and temperature stable utensils, surgical instruments, anesthesia materials, and glassware prior to any necessary sterilization. Processing cycles are pre-programmed with recommended treatment parameters for pre-washing, cleaning, rinsing, thermal disinfection, optional lubrication and drying. Six standard programs are fully programmable by an authorized operator. All models feature vertical sliding door(s) that move down to open and up to close. Power operated doors, automatic loading, automatic unloading and rack return modules are optional. A fully automated Air Glide Shuttle automation system is also a feature of the 8668.

APPLICATION

For use in healthcare facilities and laboratories where reusable items such as instruments, utensils, anesthesia sets, and glassware are handled for decontamination purposes. The Getinge 8668 will reduce or eliminate sonic cleaning, manual washing and handling risk with its intensive cleaning and thermal disinfection process. The Getinge 8668 is available as a freestanding or recessed single vertical door model; or as a double vertical door model for pass-through operation.

Thermal disinfection parameters: exposure of materials to minimum 194°F (90°C) moist heat for one minute, and up to 203°F (95°C) for ten minutes. This product is not a substitute for sterilization. Critical items, such as invasive surgical instruments, must be further processed by terminal sterilization before use in any procedure.

DIMENSIONS

Exterior: 44"W x 73-3/4" H x 39"D
(1118 x 1870 x 990 mm)

Wash Chamber: 26"W x 26"H x 31.5"D
(660 x 660 x 800 mm)

EQUIPMENT SELECTIONS

Models and Installation

- Manual Single-Door Model
 - Freestanding w/Base Trim Plates
 - Recessed One Wall w/Base Trim Plates
- Manual Double-Door Model
 - One Wall Recessed w/Base Trim Plates
- Power Single-Door Model
 - Freestanding w/Base Trim Plates
 - Recessed One Wall w/Base Trim Plates
- Power Double-Door Model
 - Recessed One Wall w/Base Trim Plates
- Power Double-Door Model prepared for Automation
 - Recessed One Wall w/Base Trim Plates



EQUIPMENT OPTIONS

Drying Package

- Vented to Dedicated Building Exhaust
- Vented to Room Space in Lieu of Building Exhaust

Heating Source

- Steam Coil Sump Heater
- Electric Coil Sump Heater

Special Rinse

- Purified Water Valve — Standard
- Optional Low Pressure Booster Pump

Special Final Rinse Tank

- Electric Heated Final Rinse Booster Tank
(Note: Increases total circuit amps)

Water Supply Connections (HW, CW and RO water)

- Standard Side-Mounted Connections
- Optional Top-Mounted Connections

Cycle Printer

- Cycle Printer Mounted on Load Side Only
- Cycle Printer Mounted on Clean Side Only

Chemical Dosing Pumps

- Standard w/ 3 Dosing Pumps
- Add Optional 4th Dosing Pump

Steam Coil Condensate

- Condensate Returned to Steam Boiler
- Condensate Cooling Kit for Drain Discharge
- Electric Heated

Pass-Thru Opening Trim Strips

- Trim 1-Side of Barrier Wall Only
- Trim Both Sides of Barrier Wall
- Freestanding Single-Door Machine

Earthquake Zone

- Seismic Anchorage Kit
- No Seismic Anchors Required

ELECTRICAL CONNECTIONS

Steam Heated Washer, With Drying

- 208V, 60 Hz, 3-Phase, 3 x 30A
- 240V, 60 Hz, 3-Phase, 3 x 25A
 - With Electric Heated Final Rinse Booster Tank
 - 208V, 60 Hz, 3-Phase, 3 x 35A
 - 240V, 60 Hz, 3-Phase, 3 x 30A

Electric Heated Washer, With Drying

- 208V, 60 Hz, 3-Phase, 3 x 60A
- 240V, 60 Hz, 3-Phase, 3 x 60A
 - With Electric Heated Final Rinse Booster Tank
 - 208V, 60 Hz, 3-Phase, 3 x 60A
 - 240V, 60 Hz, 3-Phase, 3 x 60A

SELECTED ACCESSORIES

- Manual Transfer/Load Trolley for All Wash Carts
- Stationary Hold/Transfer Table
- 5-Level Wash Cart with Removable Shelves and Spray Arms
- 4-Level Wash Cart with Removable Shelves and Spray Arms
- 3-Level Wash Cart with Removable Shelves and Spray Arms
- 2-Level Wash Cart with Removable Shelves and Spray Arms
- Rigid MIS Insert Rack for 4-Level Wash Cart
- Rigid MIS Wash Cart with Removable Shelves & Spray Arm
- Automated Wash Cart Loading Station
- Automated Wash Cart Unloading Station

(See Accessories Brochure for details on other available material handling and processing accessories not listed above, including glassware.)

QUALITY STATEMENT

Confidence in the Getinge Group is the most important quality criterion. This must be the hallmark of all our external and internal commitments, activities and products. Products and services supplied by Getinge must conform to the agreed terms and expectations to ensure recommendations for further business. The achievement of these quality goals is the basis for a continued competitive and successful enterprise.

STANDARDS AND CODES

- ETL Listed:
 - Conforms to: UL 61010A-1: 2002 and IEC 61010-2-045: 2000
 - Certified to: CAN/CSA-C22.2 No. 1010.1-92: 1992
- EN ISO 15883-1 and EN ISO 15883-2
- Seismic Anchorage per CBC: 2001

STANDARD DESIGN FEATURES

Stainless steel vertical sliding door(s) features a large **tempered glass window**. Standard light in the chamber allows operators to view chamber contents with door closed. All surfaces remain cool to touch during a cycle.

Vertical door(s) slides down to open, eliminating the hazard of a falling counterbalanced door. Doors can be specified as either **manual or power operated**, and either **single door or double door for pass-through operations**. Controls automatically halt movement of power doors if an obstacle is encountered when closing.

Both manual and power double-door units feature **door interlock control** to provide an effective barrier against cross-contamination. The opening of doors is sequenced by the controller to prevent

both from being opened simultaneously. Both doors are locked during a cycle and remain locked in the event of a power loss.

All exterior panels are **304 stainless steel construction**, with a #4 polished finish. Double-wall, **thermal and noise insulated construction** of the cabinet minimizes heat loss, while operating at a very quiet **58-60 dBA**.

The wash chamber is constructed of quality, low carbon, **16 gauge, 316L stainless steel** for increased resistance to the corrosive effect of water, contaminated materials and treatment chemicals. Removable debris screen, water manifolds, spray arms and all recirculation piping are type 316L stainless steel.

2.3 horsepower wash pump recirculates solutions to the rotary spray arms or direct injection nozzles at a rate of **185 gallons per minute** (700 liters/minute). This high-volume, low-pressure modality produces effective cleaning mechanics, without the need for a separate "gentle cycle".

Rotary spray arms fixed at the top and bottom of the chamber, with each washing cart equipped with **rotary spray arms between each load shelf**, allow solutions to reach all surfaces to be cleaned. Multiple level wash carts maximize chamber utilization for dedicated loads or mixed loads. The **5-level wash cart can accommodate 10 large instrument trays, 20 medium size trays or 40 half-size trays, per load**. The **4-level wash cart will accommodate 8 large instrument trays, 16 medium size trays or 32 half size trays**. Manifold connection to waterways and airways is automatic.

Heating process solutions in the sump tank is achieved by a closed steam coil or by two electric elements. The more efficient steam coil has a heat transfer of **19.8°F per minute** (11°C/minute). The 18 kW electric coils have a heat transfer of **9.9°F per minute** (5.5°C/minute). The capacity of the sump tank is **10.57 gallons** (40 liters). All solutions heated over **140°F (60°C)** are automatically cooled with cold water prior to discharge into the building waste system.

Three (3) peristaltic pumps are provided standard to be used to automatically inject programmed amounts of chemical additive directly into the sump tank during processing. Typical chemicals are enzymes for pre-washing, alkaline detergent for cleaning and lubricant for hinged instruments delivered in the final rinse. Delivery system includes suction wands and level sensors. Detergent compartment will accommodate three 1-gallon containers. **When low chemical is detected, an alarm message is displayed to the operator and the controller will not allow the next cycle to start until the chemical is re-filled or replaced.**

Integral drying package features two high-velocity brushless fans, a heat exchanger, PTC electric heaters and a HEPA filter. Fresh air is taken from the clean side and pulled through the heat exchanger and forced through the HEPA filter and across the PTC electric heaters before being circulated over the load. Heated chamber air exits the machine through the heat exchanger, which raises the temperature of the incoming cold air, improving efficiency of the dryer. A pressure differential switch is used to monitor effective flow of air through the HEPA filter. Drying temperature is factory set at **230°F (110°C)** and is adjustable from **176°F to 248°F (80°C to 120°C)**. Drying time is factory set for **10-minutes** and adjustable from **1 to 60 minutes**.

A cold water condensing mist eliminator cools hot vapors from the drying treatment before exiting the exhaust vents at the top of the machine. Moisture in the exhaust air is collapsed and the water is sent directly to drain. Exhaust temperature is reduced to approximately **120°F (50°C)** with a relative humidity of **40%** after two minutes. **It is recommended that this exhaust be carried off using a hooded vent to a building exhaust with 140-175 CFM**. However, the unit may be installed non-vented, allowing the exhaust to return to the room.

OPTIONAL DESIGN FEATURES

Two-Door Power Model for Automation—Model 8668 specified with pass-through power doors for automation, to be used with a combination of automatic loading, auto rack identification, auto cycle start, and/or automated unloading. Specify manual load/auto unload or both automated load and unload. When specified, the unit comes equipped with controls, plus air and communications cable to be connected to a load module, unload module, or both. When specified, the load and unload stations can be ordered and installed at a later date. Order load and unload modules separately.

Heated Final Rinse Booster Tank—Model 8668 can be equipped with an optional booster tank for pre-heating building hot water or purified water, for use in all final rinse/thermal disinfection phases. Option includes a sealed stainless steel tank with water inlet and outlet controls, electric heating coil, and temperature control integrated with the control program. Tank automatically fills and starts heating to program set point when unit is powered-up. Pre-heated water is drained into the sump when cycle reaches final rinse. Fresh final rinse water immediately refills the booster tank. Electric coil is energized to pre-heat final rinse water for use in the next cycle. Booster tank is mounted in the drying cabinet above the chamber and does not increase the size of the standard machine cabinet. Booster tank is self-disinfecting due to elevated temperature of water. This option can reduce total cycle run time by 5–8 minutes, depending on the temperature of the incoming rinse water.

Integral Cycle Printer—Model 8668 ordered fitted with an integral printer which is mounted above the control panel, to provide hard copy record of cycle phase performance. It is the customer's option to specify printer to be mounted on the soiled-load side or clean-unload side.

Top Utility Connections—The Getinge 8668 can be specified with top panel connections for building cold water, hot water and purified water when these utilities are in the ceiling. Standard supply system provides side mounted valves for connection of either floor based or ceiling based utilities. Both connection systems fill the chamber sump through the side of the chamber, providing an air gap of 11-inches. Backflow preventors are not required.



CYCLE CONTROLS

The Getinge PACS300 system provides operators with advanced control of key processing functions. Six processing cycles have been preprogrammed and are selected directly from the operator interface panel as keys P1 through P6. These standard cycles provide the following factory set processing treatments.

	CW Pre-Rinse	Enzyme Wash	Detergent Wash	HW Rinse-1	HW Rinse-2	RO Final Rinse	Drying
P1—Instrm/Long	1 Min.	3 Min.	3 Min.	1 Min.	1 Min.	1 Min.	10 Min.
P2—Instrm/Short	1 Min.	OFF	3 Min.	1 Min.	OFF	1 Min.	10 Min.
P3—Utensils	OFF	OFF	3 Min.	1 Min.	OFF	1 Min.	10 Min.
P4—Orthopedic	1 Min.	3 Min.	3 Min.	1 Min.	1 Min.	1 Min.	12 Min.
P5—MIS	2 Min.	3 Min.	3 Min.	1 Min.	1 Min.	1 Min.	12 Min.
P6—Anesthesia	2 Min.	3 Min.	OFF	1 Min.	2 Min.	2 Min.	20 Min.

All parameters of active cycles are protected by authorization codes. Once the proper authorization code has been entered, the process time and solution temperature can be adjusted to meet individual needs. The volume of chemical injected for the enzyme treatment, detergent wash and instrument lubricant are also adjustable.

The PACS300 monitors the entire cycle during progression and can display active data such as current phase, temperature of goods in the chamber and remaining time. When equipped with a printer option, the printout will include the machine ID, the date, the program selected, all program set points, plus cycle performance of each phase, including independent temperature, start time and end time.

The PACS300 control panel will also display operator messages such as ADD DETERGENT and diagnostic messages known as fault codes. The 8668 is equipped with three chemical dosing systems that include a dosing pump, suction line and level sensor. When the level sensor drops to its lowest point, the message “Add Detergent 1,” 2 or 3 is displayed. A new cycle cannot be started until the chemical container identified has been re-filled or replaced. The alarm is reset automatically when the level sensor is satisfied. Fault codes indicate a serious condition that requires the attention of an authorized service technician.

OPERATION

Advisory Note: *Getinge 8668 Washer/Disinfectors perform a critical cleaning and microbial reduction step in the processing of soiled reusable medical devices. Medical devices that will be used in sterile areas of the human body or will be contacting compromised tissues, must be terminally sterilized before each subsequent use in a human patient.*

Standby—The Getinge 8668 is normally left powered-on at all times. The controller will go into a sleep mode after 30 minutes of inactivity. Touching any selection switch will automatically awaken the control panel.

Loads—Arrange trays of instruments directly onto shelves of the 2, 3, 4 or 5-level wash carts, or arrange utensils on racks and place racks on properly spaced shelves. Use proper injection carts and racks for lumen instruments and glassware. Once the washing cart is loaded, it is transferred to the washer using a transport trolley. The soiled side door of the Getinge 8668 is open, ready to receive a new load. Align the trolley and push the loaded wash cart completely into the chamber. Make certain the wash cart is completely inside the chamber.

Closing a Manual Door—Following insertion of the load, grasp the handle of the manually operated door, lift and guide the door to its closed position. The manual door will automatically seal when the cycle is started.

Closing a Power Door—No action is required to close a power door. The door will automatically rise to close and seal against the gasket when a cycle is started.

Starting the Cycle—Select desired cycle from P1-P6 and press the start button. The door will automatically seal against the chamber gasket. The “yellow” processing lamp will alternate on and off for 10 seconds before the cycle actually starts. The cycle can be aborted and a different cycle selected during this time by pressing the start button while the lamp is flashing. Once the “yellow” process lamp glows steady, the cycle is locked in and will start.

CYCLE DESCRIPTION

Once the treatment cycle has been started, it will automatically progress through its specific phases as preprogrammed or as adjusted. The following is an example of the factory set P1 cycle for heavily soiled instruments:

Pre-Wash—Building supplied cold water fills the sump tank. Cold water is recirculated through all spray arms under pump pressure for a factory set time of 1-minute (adjustable from 15 seconds to 10 minutes), to hydrate dried soils. Upon completion of treatment, the solution is pumped to drain.

Enzyme Wash—Building supplied hot water fills the sump tank and is recirculated over the load for a factory set time of 3 minutes (adjustable from 15 seconds to 15 minutes). A predetermined amount of enzymatic detergent is automatically added to the sump as the solution is recirculated and heated to a factory set temperature of 120°F (49°C). Wash temperature is adjustable from 104°F to 198°F (40°C to 92°C). Upon completion of timed phase, the solution is pumped to drain.

Detergent Wash—Building supplied hot water fills the sump tank and is recirculated over the load for a factory set time of 3 minutes (adjustable from 15 seconds to 15 minutes). A predetermined amount of main wash detergent is automatically added to the sump as the solution is recirculated and maintained at a factory set temperature of 150°F (65°C). Wash temperature is adjustable from 104°F to 198°F (40°C to 92°C). Upon completion of timed phase, the solution is pumped to drain. Cold water is automatically added to the discharge solution to reduce the effluent temperature to 140°F (60°C) or lower.

Rinse-1—Building supplied hot water fills the sump tank and is recirculated over the load for a factory set time of 1-minute to dilute and remove wash residues. Rinse time is adjustable from 15-seconds to 10 minutes. Upon completion of time the solution is pumped to drain.

Rinse-2—Building supplied hot water fills the sump tank and is recirculated over the load for a factory set time of 1-minute to further remove residuals. Rinse time is adjustable from 15-seconds to 10 minutes. Upon completion of time the solution is pumped to drain.

Thermal Disinfection Final Rinse—Purified water fills the sump from the final rinse booster tank or directly from a treatment system such as RO or DI. When purified water is not available, the sump is filled with potable building hot water. Once the sump is full, water is recirculated over the load as the steam coil increases the water temperature. A measured amount of instrument lubricant is automatically added to the water at 158°F (70°C). Once the disinfection temperature of 194°F (90°C) is achieved, the temperature will be maintained for the factory set exposure time of 1-minute. Exposure temperature is adjustable from 180°F to 203°F (82°C to 95°C) with adjustable exposure time of 1 to 32 minutes.

HEPA-Filtered Drying—Fresh air is taken from the clean side and pulled through a heat exchanger by brushless fan motors, forced through a HEPA filter and across the PTC electric heaters before being circulated over the load. Heated chamber air exits the machine through the heat exchanger, which helps warm the incoming cold air, improving efficiency of the dryer. Pressure differential switch is used to monitor effective flow of air through the HEPA filter. Drying temperature is factory set at 230°F (110°C) and is adjustable from 176°F to 248°F (80°C to 120°C). Drying time is factory set for 10-minutes and adjustable from 1 to 60 minutes.

OPTIONAL TREATMENTS

Enzyme Treatment—Dispensing pump and cycle phase can be programmed to spray the load with a mixture of enzymatic detergent and warm water for a selected time interval, to facilitate the breakdown of protein soils.

Alkaline/Acid Wash—Optional dispensing pump and cycle phase can be added to provide a second wash of neutralizing detergent where alkaline/acid cleaning is appropriate.

Instrument Lubricant—Dispensing pump can be programmed to inject a controlled amount of liquid lubricant into the final rinse of selected cycles.

Purified Water Rinse—RO, DM or DI type purified water, under building supply pressure of 8-60 psi, can be programmed to be used in any of the post rinses or in the final rinse, in lieu of tap water. A heated purified water final rinse is recommended for removal of tap water deposits and to prepare surfaces for drying when selected. A feed water booster pump is required for low pressure supply of less than 8 psi.

Instrument Lubricant in Heated Purified Water Rinse—Combination of dispensing pump for liquid instrument lubricant and building supplied purified water. The final rinse application of an instrument cycle is simply programmed to open the purified water valve, dispense the proper amount of lubricant into the water and heat the solution above a specified temperature of 194°F (82°C), or to a maximum of 203°F (95°C).

LOAD HANDLING ACCESSORIES

Transfer Trolleys—Wheeled transfer trolleys are used to move the wash carts and racks from decontamination receiving areas to the washer/disinfector to loading and away from the unload door to the prep and pack area. Wash carts are manually moved off and pulled onto the standard fixed height trolley. The automated up/down, in/out trolley features battery powered vertical adjustment to various working heights and a powered slide mechanism that will push the wash cart into the chamber, and on the clean side, will automatically withdraw the wash cart from the chamber.

Hold/Transfer Table—Stationary stainless steel table holds one (1) wash cart. Slots in runners hold wheels of wash cart to prevent cart from moving until ready. Table can be positioned in front of load and/or unload door to be used as a work table for manual operations such as: hold wash cart for loading and unloading operations, without exchanging the wash cart; transfer wash cart from mobile trolley to await loading in manual pass-through operations; withdraw wash cart on the unload side to hold for dispatch using a transfer trolley. The table can also be used as a pass-through window accessory, in one or more end-to-end units.

WARRANTY*

Getinge warrants that each washer/disinfector is carefully tested, inspected and leaves the factory in proper working condition, free from visible defects. Washers are warranted for one year from the start of the warranty, including parts and labor (excluding expendable parts).

*Applies only to Domestic U.S., Puerto Rico, and Canadian shipments.

PREVENTIVE MAINTENANCE

A coast-to-coast network of factory trained service representatives can provide periodic inspection and adjustments to assure low-cost peak performance. Your Getinge sales representative can provide information regarding the optional Preventive Maintenance Agreement (PMA).

WASH CARTS

Multiple Level Wash Carts—Standard wash carts are available with 2, 3, or 4 levels of removable shelves. Each shelf will hold 2 large instrument trays. Unique intermediate shelves and spray arms are removable to allow operators the flexibility to clean and disinfect dedicated loads of instruments, mixed loads of instruments with utensils, or rigid endoscopes and anesthesia tubing with standard instruments. Five (5) level wash cart will hold 10 SPRI type instrument trays per load.

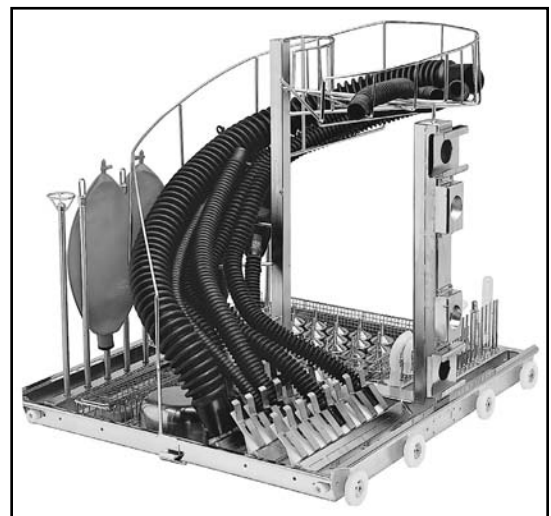


Tubular Instrument Wash Racks—Unique tubular instrument rack accommodates a wide range of tubular-cannula instruments such as trocars, suction tips, syringes, needles, rigid endoscopes and catheters, in combination with standard instrument trays. Cleaning solutions are forced up through all tubular passages to effectively clean and disinfect instruments. Available in a half-set for up to 20 instruments or in a full-set front and back, for up to 40 tubular instruments. Rack installs only on lower shelf of 3- or 4-level wash carts.



Laparoscopic Scissors Cassette—Unique cassette plugs into the Tubular Instrument Wash Rack and provides injection ports for eight (8) demountable Laparoscopic Scissors. Cleaning solutions are forced through tubing to clean and disinfect instruments.

Anesthesia/Respiratory Wash Cart—Unique wash cart for processing temperature stable anesthesia hoses, masks, bellows, tubing and breathing bags. Accepts 8-12 AN sets with a maximum of 24 hoses. Cleaning solutions and drying air is forced into all items.



AUTOMATED LOAD AND UNLOAD STATIONS

The 8668 can be specified for automation and be equipped with either a loading station, an unloading station or with both. The load station will automatically advance and queue up to 2 wash carts for loading. When the Model 8668 is set-up for automation, the controller will automatically open the load door and allow the loader to insert the wash cart into the chamber. The load door will be closed, the cycle will be automatically selected and started. Meanwhile, the load station will automatically advance the second wash cart up to the door, leaving room for another wash cart to be placed on front

of the load station. When the cycle is completed, the controller will automatically open the unload door. The unloader will automatically pick and remove the wash cart from the chamber and sequence it to the end of the station for dispatch by clean room staff. Meanwhile the washer will automatically close the unload door, open the load side door, advance a new wash cart into the chamber and start the sequence over again. Three consecutive loads can be processed without operator attention, freeing up to 90 minutes for other tasks. Transfer trolleys are used to move wash carts to and from the automatic stations. **NOTE: 60 PSI compressed air is required to operate loader and unloader.**



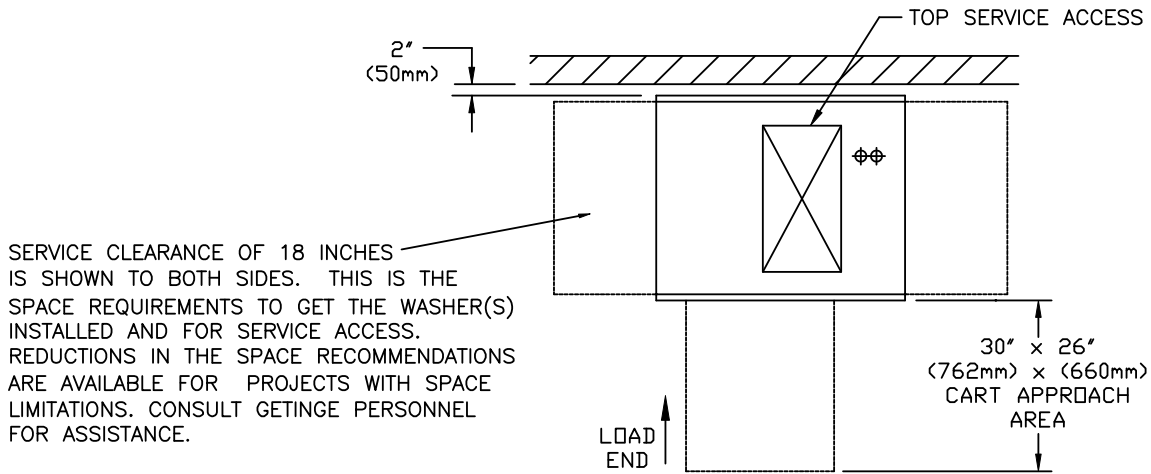
8668 AIR GLIDE SHUTTLE AUTOMATION SYSTEM

The AGS System is a single-point automated loading and unloading system that can serve up to 7 washer-disinfectors in a single barrier wall. The AGS System is offered as a full-automation alternative to multiple loading and unloading stations or wrap-around roller conveyor systems. A workload analysis will help identify the number of washers required, from 3 to 6. One empty bay is recommended for future growth. Load station and unload station conveyors can accommodate 2, 3 or 4 wash carts simultaneously and the automated wash cart return conveyor can accommodate 4, 5, 7 or 9 empty wash carts. Operator places soiled loads on the automated loading station and the system does all the work. Loads queue to

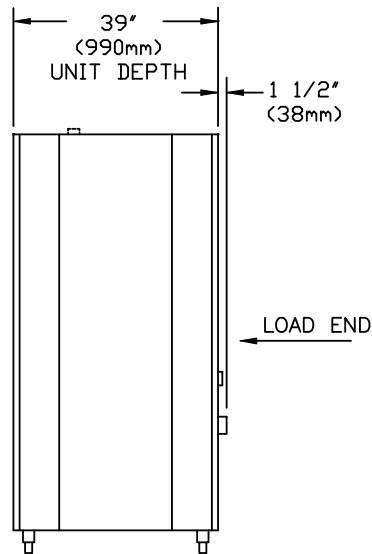
the shuttle, which automatically delivers the wash cart to the next available washer and inserts the load into the chamber. The processing cycle is automatically selected and the door is closed. The shuttle returns to the loading station for the next load. Once a cycle is complete, the door on the clean side is automatically opened. The clean side shuttle automatically leaves its parked position and glides to the open door washer to remove the clean load. The door is automatically closed as the shuttle delivers the clean load to the unload station, where it is automatically moved onto the conveyor. Clean loads are automatically cued to the end of the unload station for dispatch to prep and pack stations. Empty wash carts are placed on the return conveyor where they are automatically moved through the barrier wall, back to the soiled side for re-loading.



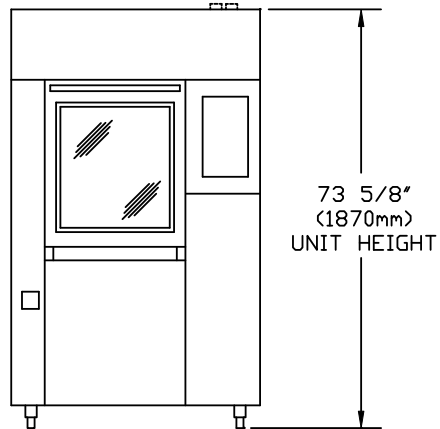
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PLAN VIEW



SIDE ELEVATION

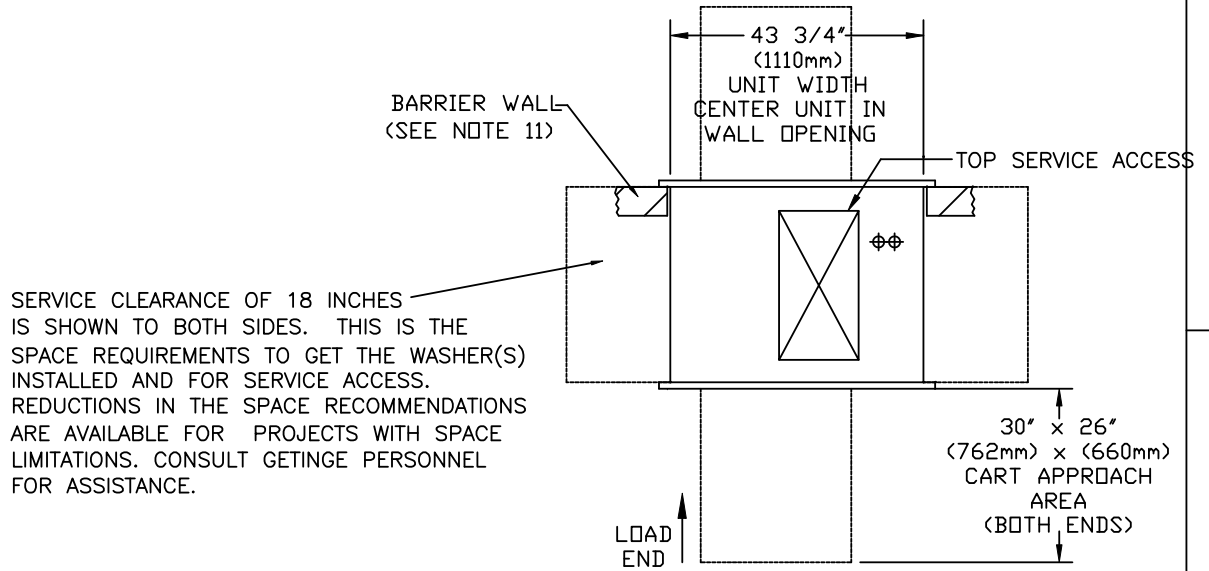


FRONT ELEVATION

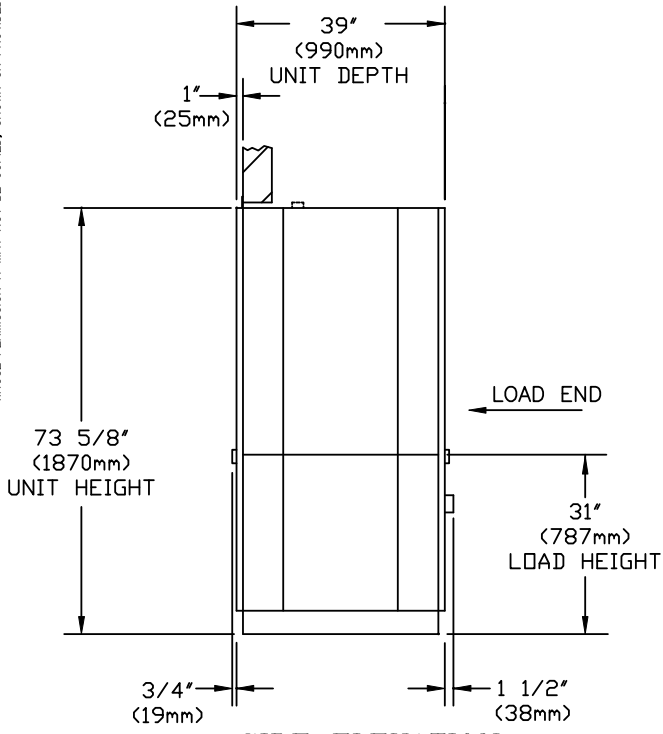
**8668 WASHER DISINFECTOR
SINGLE DOOR W/DRYER & SPECIAL RINSE
CABINET UNIT**

DRAWN BY KPR		APPROVED BY-DATE GZ 07/03/07		IF NO OTHER TOLERANCE GIVEN	DATE 07-03-07	SCALE NTS
D		PROJECTION	CLIENT	GETINGE GETINGE USA, Inc. 1777 East Henrietta Road Rochester, NY 14623-3133		
C						
B	122428	13/07/07	KR	MC	ORIGINAL SIZE C	DRAWING NUMBER HSO4127
A	122336	07/03/07	KPR	GZ		
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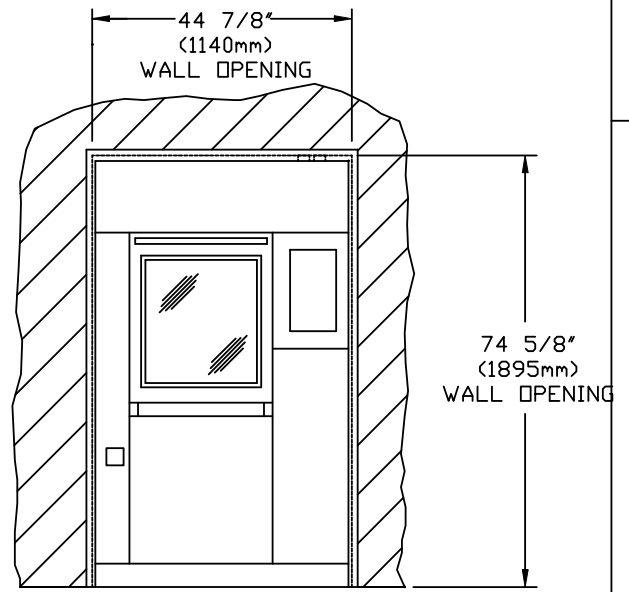
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PLAN VIEW



SIDE ELEVATION

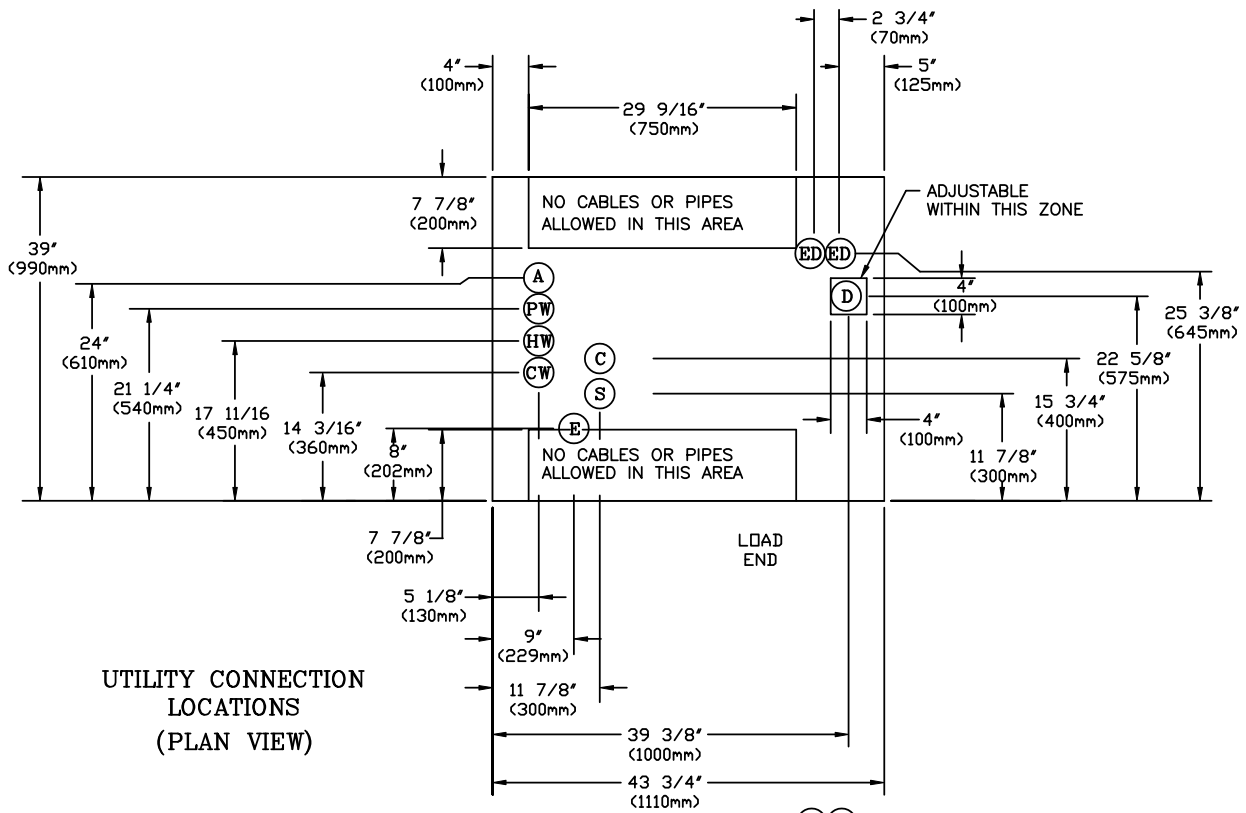


**FRONT ELEVATION
LOAD END**

**8668 WASHER DISINFECTOR
DOUBLE DOOR W/DRYER & SPECIAL RINSE
RECESSED ONE WALL ONLY**

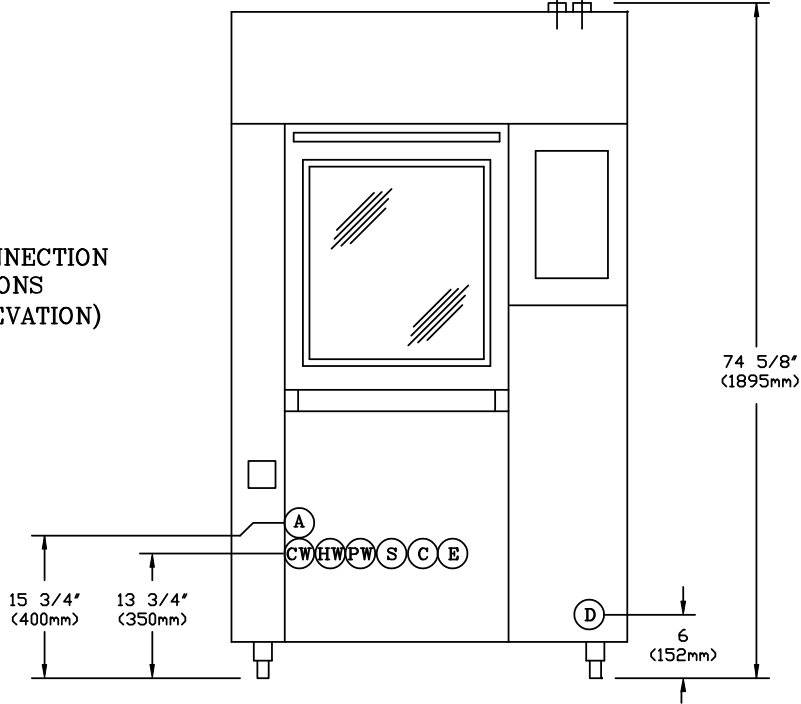
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C		REFERENCE DOCUMENTS	TITLE			
B			8668 WASHER DISINFECTOR	GETINGE USA, Inc. 1777 East Henrietta Road Rochester, NY 14623-3133		PAGE 2 of 7
A				DRAWING NUMBER HSO4127	REV B	
REV	REVISION/EC NO.	DATE DD-MMM-YY	REVISED BY	CHECKED BY		
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UTILITY CONNECTION LOCATIONS
(PLAN VIEW)

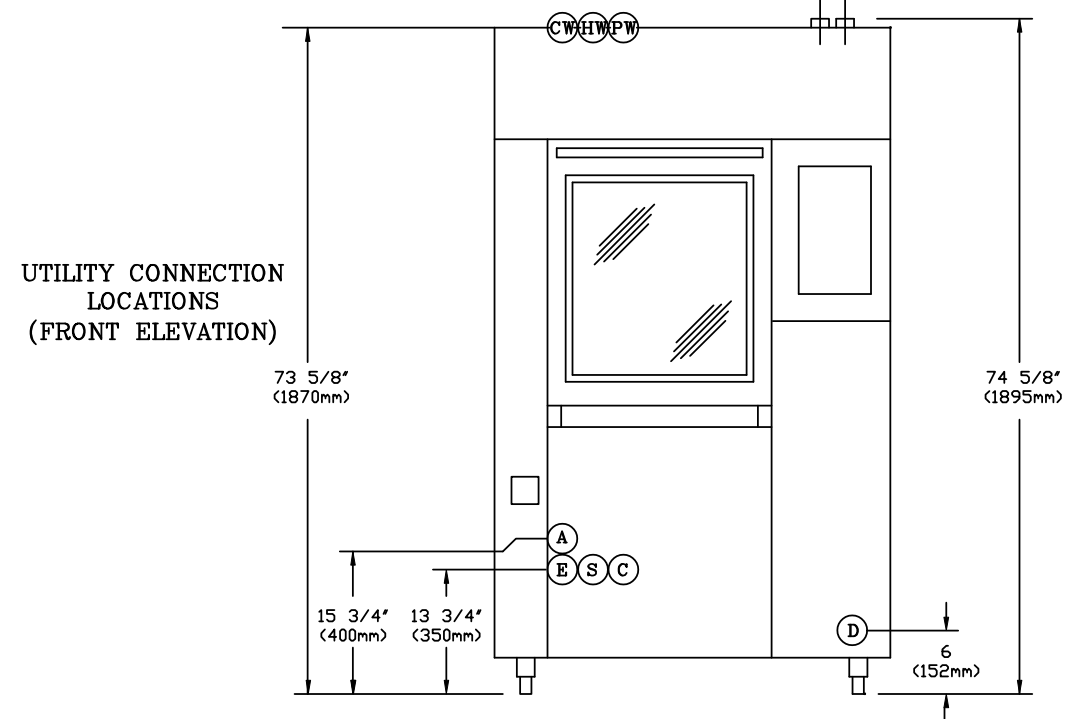
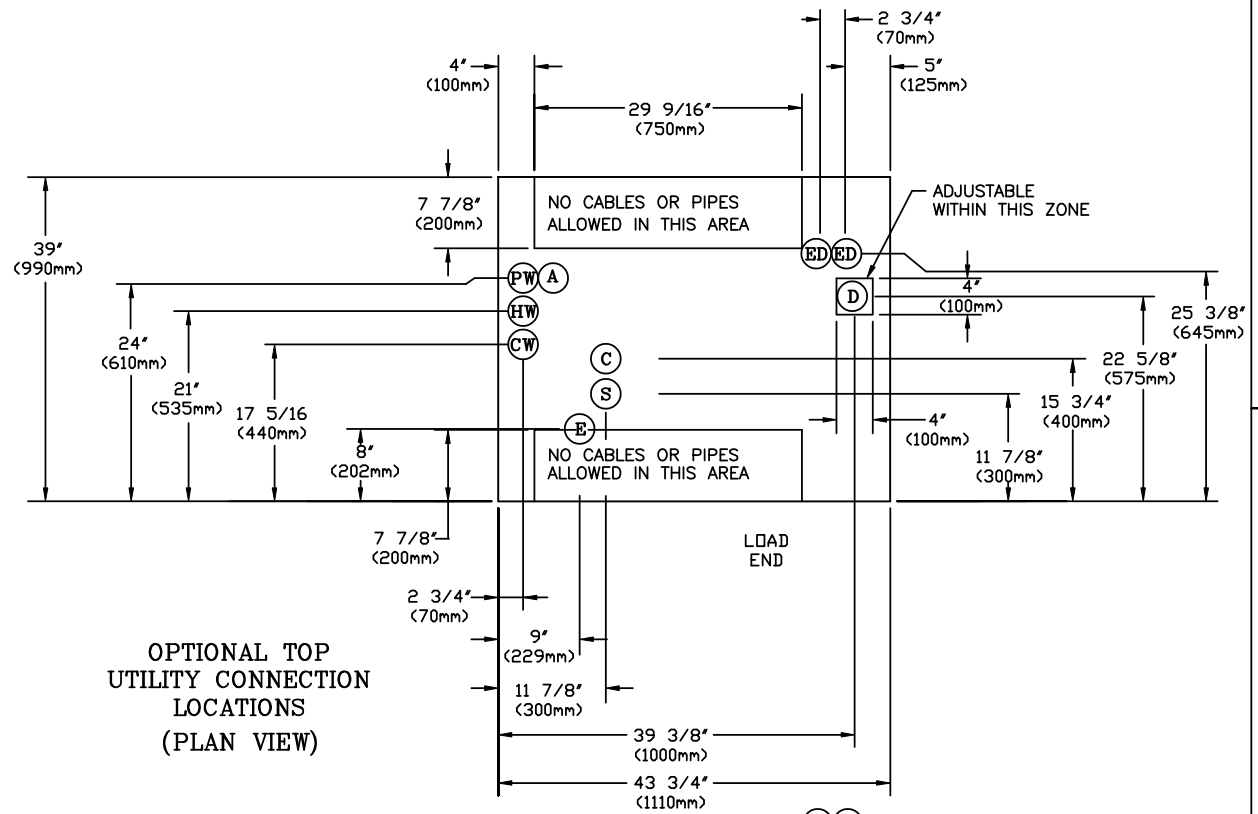
UTILITY CONNECTION LOCATIONS
(FRONT ELEVATION)



SEE SHEET 1

DRAWN BY KPR		APPROVED BY-DATE GZ 07/03/07		IF NO OTHER TOLERANCE GIVEN	DATE 07-03-07	SCALE NTS
PROJECTION		CLIENT		GETINGE GETINGE USA, Inc. 1777 East Henrietta Road Rochester, NY 14623-3133		
REFERENCE DOCUMENTS		TITLE 8668 WASHER DISINFECTOR				
REVISION HISTORY		SYMBOL LIBRARY		DRAWING NUMBER HS04127	REV B	PAGE 3 of 7
THE FILENAME IS: HS04127 THIS PLOT MADE: 13/07/07						

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D		PROJECTION	CLIENT	GETINGE		ORIGINAL SIZE C
C						
B		REFERENCE DOCUMENTS	TITLE	GETINGE USA, Inc. 1777 East Henrietta Road Rochester, NY 14623-3133		PAGE 4 of 7
A			8668 WASHER DISINFECTOR			
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NOTICE: WORK BY OTHERS

SAFE AND EFFICIENT OPERATION OF THIS PRODUCT IS DEPENDENT UPON THE OWNER/USER PROVIDING THE SERVICES SPECIFIED HEREIN AS WELL AS ANY OTHER NORMALLY ACCEPTED ELECTRICAL, MECHANICAL, OR PLUMBING INTERFACE BETWEEN USERS SUPPLY AND THIS PRODUCT. GETINGE, INC. WILL NOT ASSUME RESPONSIBILITY FOR PROBLEMS THAT RESULT FROM NONCOMPLIANCE WITH THE INDICATED CONDITIONS. THE FOLLOWING CONDITIONS AND SERVICES ARE REQUIRED FOR THIS EQUIPMENT AND ARE TO BE PROVIDED BY OTHERS.

IT SHALL BE THE CUSTOMER'S RESPONSIBILITY TO COMPLETE ALL ELECTRICAL CONNECTIONS USING PROPERLY SIZED WIRING IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE AND ALL APPLICABLE LOCAL CODES. SEE THE GETINGE INSTALLATION MANUAL FOR SPECIFIC INSTRUCTIONS. WATER AND STEAM LINE SHUTOFF VALVES AND A ELECTRICAL DISCONNECT SWITCH(ES) MUST BE PROVIDED AT EACH WASHER.

SERVICES

ON UNIT CONNECTION	SERVICES PIPE SIZE TO WASHER	PRESSURE RANGE DYNAMIC	FLOW RATE	TEMPERATURE	CONSUMPTION PER CYCLE
CW = COLD WATER * 3/4" (20mm) NPT COUPLING	1" NPT (25mm)	30-60 PSIG (200-400 kPa) SEE NOTE #1	6-8 GPM (23-30 l/MIN)	NOT TO EXCEED 90° F (32° C)	10.57 GAL/PHASE (40 LITERS)
HW = HOT WATER * 3/4" (20mm) NPT COUPLING	1" NPT (25mm)	30-60 PSIG (200-400 kPa) SEE NOTE #1	6-8 GPM (23-30 l/MIN)	110-140° F (43-60° C)	10.57 GAL/PHASE (40 LITERS)
PW = PURIFIED WATER * 3/4" (20mm) NPT COUPLING	1" NPT (25mm)	8-60 PSIG (50-400 kPa) SEE NOTE #1	5-9 GPM (19-34 l/MIN)	N/A	10.57 GAL (40 LITERS)
D = DRAIN 2" (50mm) DIA.	N/A	N/A	20 GPM MINIMUM SEE NOTE #3	N/A	N/A
ED = EXHAUST DUCT 2 @ 2" (50mm) DIA. SEE NOTES 5 & 6	N/A	N/A	140-175 CFM	120-140° F (49-60° C)	N/A
S = STEAM 1/2" (13mm) NPT	3/4" NPT (20mm)	45-90 PSIG (300-500 kPa)	2.76 LB/MIN PEAK (1.25 kg/MIN) 1.98 LB/MIN AVG (.90 kg/MIN)	N/A	2.2 LB/Min (1.00 Kg/Min)
C = CONDENSATE RETURN 1/2" (13mm) NPT	3/4" NPT (20mm)	N/A ZERO BACK PRESSURE	N/A	N/A	N/A
A = COMPRESSED AIR SEE NOTE 16 3/8" (10mm) QUICK CONNECT	3/8" NPT (10mm)	60-80 PSIG (400-530 kPa) SEE NOTE #1	N/A	N/A	N/A

* SEE WATER QUALITY NOTE #15

** CONSUMPTION BASED ON INCOMING STEAM TEMPERATURE

E ELECTRICAL SUPPLY 60 HZ				NOISE LEVEL- dBA		
SERVICE	STEAM HEATED W/ DRYING		ELECTRIC HEATED W/ DRYING		WASHING	
	W/ BOOSTER	W/O BOOSTER	W/ BOOSTER	W/O BOOSTER	DRYING	
208V, 3PH, 60 HZ	35A, 11.1 kW	30A, 6.5 kW	60A, 20.5 kW	60A, 20.5 kW	60 dBA	
240V 3PH, 60 HZ	30A, 11.5 kW	25A, 6.5 kW	60A, 21.3 kW	60A, 21.3 kW	65 dBA	
					WEIGHT- LB (Kg)	
					UNCRATED	850 LBS (385 Kg)
					CRATED	948 LBS (430 Kg)

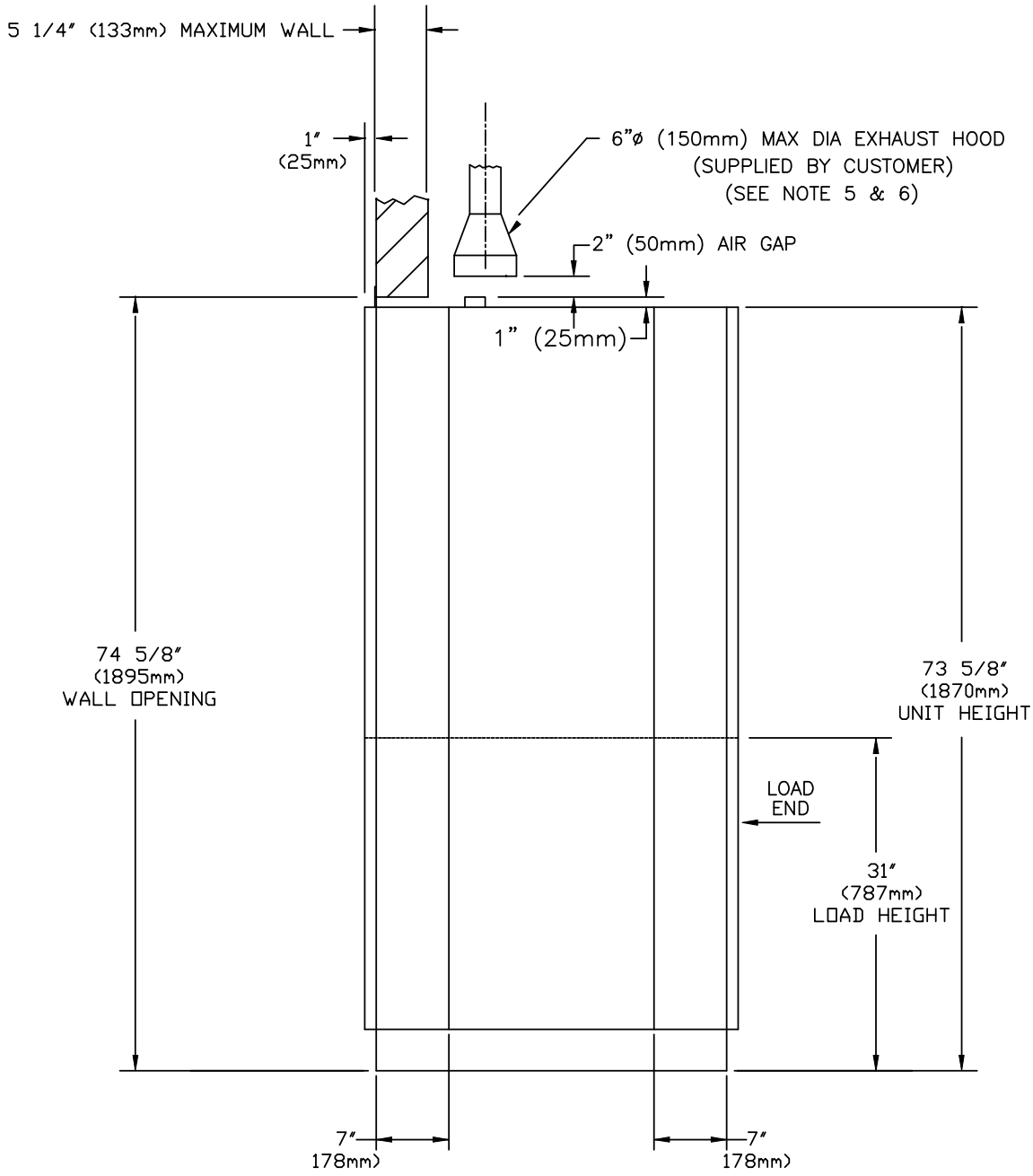
MINIMUM CLEARANCE REQUIRED FOR MOVING INTO POSITION			TYPICAL HEAT LOSS- BTU/HR		
	ACTUAL	CLEARANCE	MODEL	CLEAN SIDE	SOILED SIDE
WIDTH	3'-7 3/4"	3'-9 3/4"	RECESSED SINGLE-DOOR	1706	
HEIGHT	6'-1 3/4"	6'-9 3/4"	RECESSED DOUBLE-DOOR	1706	3412
DEPTH	3'-5"	3'-7"			

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SEE SHEET 1

D									
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SIDE ELEVATION
CUSTOMER EXHAUST DUCT INSTALLATION
(SEE NOTE 5)

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8668 WASHER DISINFECTOR		DRAWING NUMBER HS04127		REV B	PAGE 6 of 7	
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NOTES ARCHITECTS AND CONTRACTORS

- 1) IT SHALL BE THE CUSTOMER'S RESPONSIBILITY TO INSURE BY USE OF PRESSURE REGULATORS OR OTHER MEANS THAT MAXIMUM SPECIFIED PRESSURES ARE NOT EXCEEDED. DYNAMIC PRESSURE IS MEASURED DURING FLOW CONDITIONS. STATIC PRESSURE SHALL NOT EXCEED 60 PSIG (400 kPa) FOR ANY SERVICE CONDITION. PRESSURE TO BE MEASURED AT POINT OF CONNECTION TO THE WASHER.

A SEPARATE SUPPLY PUMP MUST BE USED IF PRESSURE OF PURIFIED RINSE IS BELOW 8 PSIG (50 kPa)
- 2) IT SHALL BE THE CUSTOMER'S RESPONSIBILITY TO ELIMINATE WATER HAMMER CONDITIONS SHOULD THEY OCCUR IN THE SERVICE PIPING. IF REQUIRED, SHOCK ARRESTORS OR PRESSURE REGULATORS WOULD BE PROVIDED AND INSTALLED BY THE CUSTOMER.
- 3) IT SHALL BE THE CUSTOMER'S RESPONSIBILITY TO PROVIDE A PROPERLY SIZED AND LOCATED DRAINAGE SYSTEM IN ACCORDANCE WITH THE UNIFORM PLUMBING CODE. THE DRAIN LINE PROVIDED BY THE CUSTOMER MUST ACCOMMODATE A MINIMUM FLOW OF 20 GPM (76 L/MIN). CONSIDERATION SHOULD BE GIVEN TO OTHER EQUIPMENT DUMPING INTO DRAIN LINE TO PREVENT SLOW DRAINAGE, BACK-UP, OR OVERFLOW.
- 4) IT SHALL BE THE CUSTOMER'S RESPONSIBILITY TO INSTALL THE WATER BACK FLOW PROTECTORS AND STRAINERS.
- 5) WHEN VENTING THE DRYING EXHAUST, IT SHALL BE THE CUSTOMER'S RESPONSIBILITY TO PROVIDE A VENTING SYSTEM CAPABLE OF EXHAUSTING 140-175 CFM (240-300 CU M/HR) MEASURED AT THE POINT OF INTAKE ABOVE THE UNIT. NOTE: THE HIGH WATER VAPOR CONTENT AND TEMPERATURE (120°-140° F) (49°-60° C) OF THE EXHAUST MAY REQUIRE A SEPARATE DEDICATED EXHAUST. DUCTING AND EXHAUST FAN ARE TO BE CONSTRUCTED OF MATERIALS UNLIKELY TO BE AFFECTED BY MOISTURE. THIS INCLUDES BUT IS NOT LIMITED TO, CORROSION. DUCTING SHALL BE SEALED TO PREVENT LEAKING, AND CONSTRUCTED TO PERMIT DRAINAGE OF CONDENSATE.
- 6) WHEN NOT VENTING THE DRYING EXHAUST, IT SHALL BE THE CUSTOMER'S RESPONSIBILITY TO ASSURE THE SPACE CAN HANDLE THE HOT VAPOR LADEN AIR FROM THE DRYING HEAT EXCHANGER PER NOTE 5.
- 7) IT SHALL BE THE CUSTOMER'S RESPONSIBILITY TO COMPLETE ALL ELECTRICAL CONNECTIONS USING PROPERLY SIZED WIRING IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE.
- 8) IT SHALL BE THE CUSTOMER'S RESPONSIBILITY TO PROVIDE A FUSED DISCONNECT SWITCH IN ALL ELECTRICAL SUPPLY LINES AT THE WASHER LOCATION, AS REQUIRED BY LOCAL CODES.
- 9) IT SHALL BE THE CUSTOMER'S RESPONSIBILITY TO LEVEL THIS EQUIPMENT.
- 10) IT SHALL BE THE CUSTOMER'S RESPONSIBILITY TO PROVIDE NON-SLIP FLOORING IN THE AREAS DEFINED AS "APPROACH AREA", ON PLAN VIEW OF THIS DRAWING.
- 11) IT SHALL BE THE CUSTOMER'S RESPONSIBILITY TO PROVIDE THE BARRIER WALL SEPARATING SOILED AND CLEAN AS REQUIRED. MAXIMUM THICKNESS IS 5 1/4" (133mm).
- 12) INSTALLING TWO OR MORE WASHERS SIDE-BY-SIDE WITH LESS THAN 18" (458 mm) CLEARANCE BETWEEN UNITS REQUIRES GETINGE APPROVAL.
- 13) REMOTE DETERGENT CONTAINERS ARE TO BE WITHIN 5' (1524mm) OF THE UNIT AND ELEVATED NO MORE THAN 24" (610mm) ABOVE THE SUPPORTING FLOOR, UNLESS AN ALTERNATE DISTRIBUTION SYSTEM WILL SUPPLY THE WASHERS.
- 14) IT SHALL BE THE CUSTOMER'S RESPONSIBILITY TO PROVIDE SHUTOFF VALVES FOR INCOMING HOT WATER, COLD WATER, PURIFIED WATER, STEAM, AND CONDENSATE (OPTION). THE VALVES ARE TO BE IN CLOSE PROXIMITY OF THE WASHER/DISINFECTOR, BELOW THE CEILING, AND ACCESSIBLE TO SERVICE PERSONNEL.
- 15) CLEANING PERFORMANCE OF THIS PRODUCT IS BASED ON POTABLE WATER OF GOOD QUALITY. THE QUALITY OF THE HOT AND COLD WATER SUPPLIES SHOULD BE CHECKED PRIOR TO INSTALLATION. WHEN PURIFIED WATER IS USED FOR THE FINAL RINSE, RESISTIVITY MUST BE BETWEEN 50,000-200,000 OHMS TO AVOID HARMFUL AFFECTS.
- 16) COMPRESSED AIR IS ONLY REQUIRED WHEN THE AUTO LOADER AND/OR AUTO UNLOADER IS CONFIGURED FOR THE WASHER. AIR TO BE FREE OF OIL AND WATER.

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