

UNIT SIZE	HEAT LOSSES BTU/HR (KCal/HR)		
	CONTROL AREA	RECESS AREA *	CABINET MODEL *
39" (1000)	2,500 (630)	4,941 (1245)	7,441 (1876)
51" (1300)	2,500 (630)	6,216 (1567)	8,716 (2197)

\* ADD 2,800 BTU FOR OPTIONAL BOILER

UNIT	①	②	③	④	⑤	⑥
39"	3'-5" [1041]	2'-11" [890]	3'-3" [991]	4'-0 7/16" [1230]	3'-7" [1092]	3'-0" [914]
51"	5'-0" [1524]	3'-10" [1168]	3'-7" [1092]	5'-0" [1524]	4'-7 1/2" [1410]	3'-6" [1067]

										DATE 01/08/07				
								<b>GETINGE</b>						
				TITLE										
								GETINGE USA, Inc.						
								1777 East Henrietta Road						
								Rochester, NY 14623-3133						
								DRAWING NUMBER HS4125						
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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 user's supply and this product. Getinge USA will not assume responsibility for problems that result from non-compliance with the above conditions. The following conditions and services are required by Getinge USA equipment and are to be provided by others.

**TABLE A: PLUMBING CONNECTIONS & UTILITIES** (Refer to notes 1–6 on sheet 6)


ON UNIT CONNECTION	PIPE SIZE TO UNIT	PRESSURE RANGE DYNAMIC AT UNIT	FLOW RATE MAX
S = Steam 3/4" (19) NPT female see note 4	1"(25) NPT	50–70 psig (3.5–4.9 kg/cm <sup>2</sup> )	200 lbs./Hr (91 kg/Hr)
CW = Cold water 3/4" (19) NPT female see note 1	1"(25) NPT	40–70 psig (2.8–4.9 kg/cm <sup>2</sup> )	11 gpm (2.5 m <sup>3</sup> /Hr)
D = Drain 1 1/2" (38) ODT	See note 3	Not applicable	See note 3
HW = Hot water 3/8" (10) NPT female see note 2	1/2"(13) NPT	20–50 psig (1.4–3.5 kg/cm <sup>2</sup> )	0.6 gpm (.14 m <sup>3</sup> /Hr)
SV1 = Sterilizer (Jacket) pressure relief valve vent 3/4" (19) NPT female	See note 5	Not applicable	See note 5
SV3 = Steam Generator pressure relief valve vent 1" (25) NPT female	See note 5	Not applicable	See note 5

**TABLE B: ELECTRICAL CONNECTIONS & UTILITIES** (Refer to note 7 on sheet 6)

SERVICE	CONDUIT SIZE	UTILITY NOMINAL VOLTAGE	UTILITY VOLTAGE RANGE	MAX. CURRENT NOMINAL VOLTAGE	Breaker/Fusing Recommended
E1= Power Box	1/2" (13)	115V, 50/60 Hz, 1~	+/- 10%	12 A	15 A
OPTIONAL – connections required for optional equipment listed below					
E2= Integral Transformer Box	1/2" (13)	230V, 50/60Hz, 1~	+/- 10%	5 A	15 A
For 26" long sterilizer chamber with 30KW Integral Steam Generator:  K= Electric 4 WIRE WITH GROUND	1 1/4" (32)	208V, 50/60Hz, 3~	188 – 216V	84 A	100 A
	1" (25)	240V, 50/60Hz, 3~	217 – 250V	73 A	100 A
	1" (25)	380V, 50Hz, 3~	374 – 432V	46 A	60 A
	1" (25)	415V, 50Hz, 3~	374 – 432V	42 A	60 A
	3/4" (19)	480V, 60Hz, 3~	432 – 500V	36 A	50 A
	3/4" (19)	600V, 60Hz, 3~	540 – 625V	29 A	40 A
For 39" or 51" long sterilizer chamber with 45KW Integral Steam Generator:  K= Electric 4 WIRE WITH GROUND	2" (51)	208V, 50/60Hz, 3~	188 – 216V	125 A	150 A
	1 1/2" (38)	240V, 50/60Hz, 3~	217 – 250V	108 A	125 A
	1" (25)	380V, 50Hz, 3~	374 – 432V	68 A	80 A
	3/4" (19)	415V, 50Hz, 3~	374 – 432V	63 A	80 A
	3/4" (19)	480V, 60Hz, 3~	432 – 500V	54 A	60 A
	1/2" (13)	600V, 60Hz, 3~	540 – 625V	43 A	60 A

**OPERATING ENVIRONMENTAL CONDITIONS**

Temperature: 50° – 104°F (10° – 40°C)  
 Relative Humidity: 10% – 90% non-condensing  
 Atmospheric Pressure: 0–6500 feet (0–2000 meters) elevation, (Special software needed for higher elevations)  
 Pollution Degree: 2

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SYMBOL LIBRARY		600 SERIES ROUGHING–IN DRAWING TABLES DOCUMENT		GETINGE USA, Inc. 1777 East Henrietta Road Rochester, NY 14623–3133		
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**NOTES TO ARCHITECTS & CONTRACTORS**

- 1) Cold water:
- Cold water quality: Use potable water with a hardness of 0.5–10 grains/gal [8–170 ppm].
  - Back-syphonage protection is required by others. Check local plumbing code and install backflow preventer. (Examples: Vacuum breaker, dual-check or reduced pressure type).
  - An optional water booster pump is available:
    - \* For installations where water pressure is at least 20 psig [1.4 kg/cm<sup>2</sup>] dynamic but less than 35 psig [2.8 kg/cm<sup>2</sup>].
    - \* To achieve satisfactory performance with dense loads where dynamic pressure is at or below 35 psig [2.8 kg/cm<sup>2</sup>].
    - \* If required backflow preventer lowers the water pressure below the minimum specified.
    - \* The optional booster pump requires mechanical electrical and plumbing hook-up by customer. A separate electrical service to the water booster pump junction box is necessary. Contact your local Getinge USA representative for Utility Data
- 2) Hot water to be supplied only when integral steam boiler is selected.
- Water quality information: For optimum results, the feed water supply should be tested prior to initial startup. If the mineral content exceeds the following recommended limits, various external treatment processes (water softener, RO, etc.) may be used to correct the problem. Routine manual blow-down or automatic blow-down option lowers concentrations of impurities and maintains the pH level above 7.0.
  - Feedwater quality:


HARDNESS	0.5–5.0 GRAINS/GALLON [8–85 PPM]
RESISTIVITY	NOT TO EXCEED 50 KOHMS/CM
TEMPERATURE	100°F – 150°F [38°C – 65°C]
TOTAL DISSOLVED SOLIDS	150 PPM MAX.
pH	6.8–7.5

- 3) It shall be the customer's responsibility to provide a proper drainage system in accordance with applicable local codes. Temperature of drain water will not exceed 140°F [60°C] under normal operating conditions. If cold water supply is cut-off, temperature may exceed 200°F [93°C].
- 4) For units without an integral steam generator, it shall be the customer's responsibility to provide condensate free steam between 97% and 100% saturated vapor.
- 5) Getinge USA recommends piping all vessel pressure relief valves to a vented manifold outside the equipment service area. Caution must be exercised not to reduce the discharge capacity of the relief valve. Recommended piping practices for relief valve piping can be found in ASME Boiler and Pressure Vessel Code Section VIII, Div. 1, UG–135. Check local codes for special requirements.
- 6) All customer connections to sterilizer must be labeled. For safety, all shutoff valves must be reachable when standing on the floor at the equipment (i.e. water, steam, compressed air).
- 7) Electrical Supply
- It shall be the customer's responsibility to complete all electrical connections in accordance with the National Electrical Code and all applicable local codes.
  - A dedicated, permanently connected electrical supply with conveniently accessible disconnect switch (supplied by customer) is required for each sterilizer service indicated in Table B. Where both single phase and 3 phase supply is required, two disconnect switches can be used, yet shall be properly labeled and located as close as possible to each other and the sterilizer. Refer to the Getinge USA Installation Manual for specific instructions.
  - For standard 115VAC units, 115VAC supply is required at "E1". For units with the optional 230V to 115V step-down transformer (integral with sterilizer), 230VAC supply is required at "E2" (and no connection at "E1").
  - For voltages other than 115V or 230V, a separate universal transformer is available to provide 115VAC to "E1" with input voltage configurable to 100, 200/208, 380/400/415, or 440/460/480. It shall be the customer's responsibility to install the universal transformer. Transformer box dimensions: 10" L x 7 1/4" W x 5 3/8" D [254 x 184 x 137].
- 8) Double Door units, recessed into two walls, require partial dis-assembly of unit to allow installation into fixed walls.
- 9) Shipment and Building Access.

Required Door Access – Free and Clear		Width	Height
a) On skid/completely assembled		45"	80"
b) Off skid/completely assembled		40"	75"
c) Off skid/some paneling removed at extra cost – Requires casters		35"	73"

**UNIT WEIGHTS AND CRATED MEASUREMENTS TABLE**

UNIT SIZE	MAX. WEIGHT		CRATED MEASUREMENTS		
	CRATED	UNCRATED	LENGTH	WIDTH	HEIGHT
26" SINGLE DOOR	1,160	1,010	64"	44"	80"
39" SINGLE DOOR	1,365	1,190	64"	44"	80"
DOUBLE DOOR	1,508	1,333			
51" SINGLE DOOR	1,506	1,331	79"	44"	80"
DOUBLE DOOR	1,649	1,474			

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A 122383 05/07/07 DK TL		600 SERIES ROUGHING-IN DRAWING		GETINGE USA, Inc. 1777 East Henrietta Road Rochester, NY 14623–3133		
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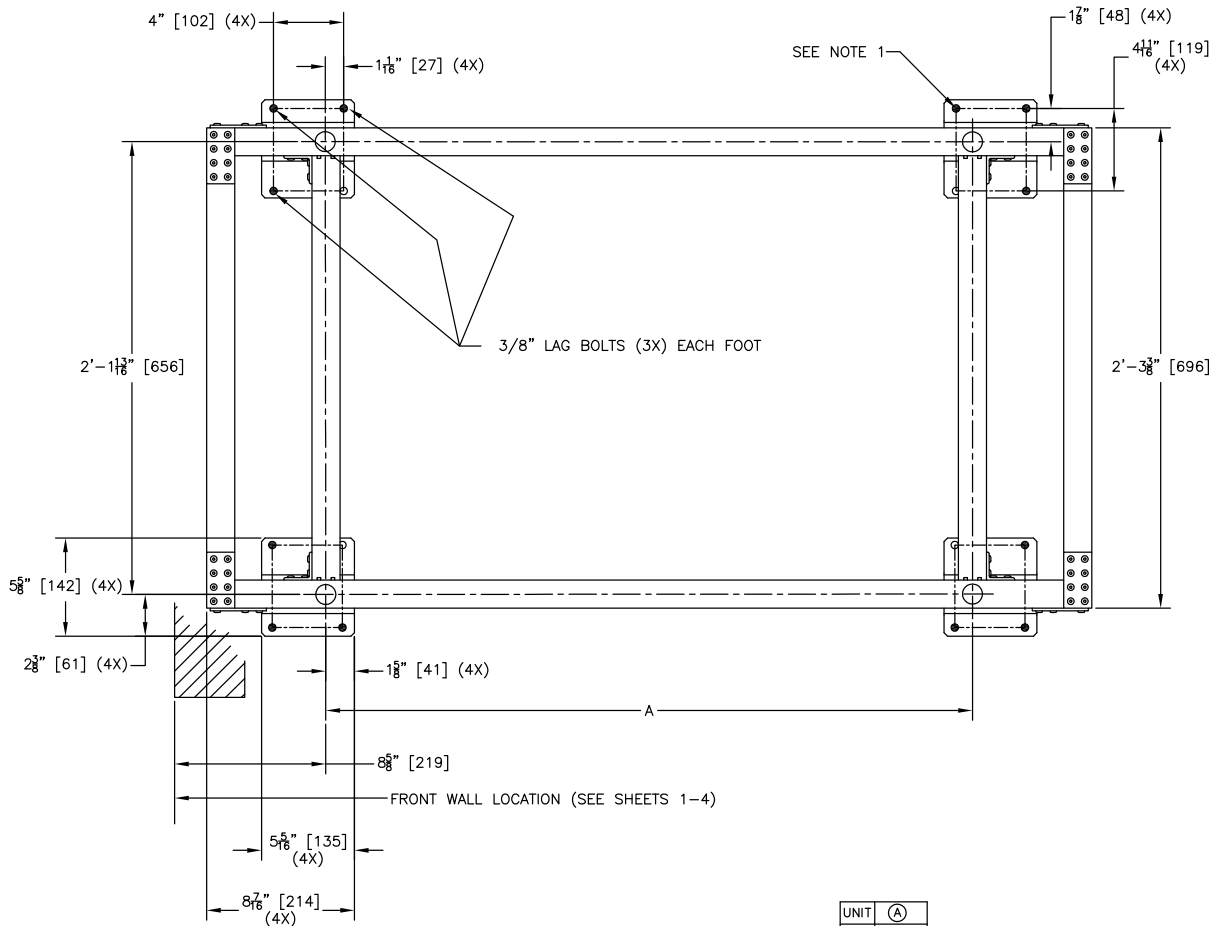
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NOTE:

- 1) FILLED IN HOLES ARE THE HOLES USED FOR ANCHORING IN THAT LOCATION.



UNIT	(A)
26"	1'-5 3/8" [533]
39"	2'-10" [863]
51"	3'-10" [1168]

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