

TECHNICAL DATA SHEET

PRIMUS GENERAL PURPOSE – Large Steam Sterilizers

These sterilizers are designed for laboratory applications including research laboratories, bio-containment and animal care facilities. PRIMUS sterilizers are designed and manufactured in the USA according to Quality Management Systems which are in compliance with ISO 9001:2000, ISO 13485:2003 and FDA's Good Manufacturing Practice (GMP) for Medical Devices: General Regulation (21CFR Part 820). Large size sterilizers are one segment of 19 standard sizes manufactured by PRIMUS. We can also custom manufacture a sterilizer to meet your specifications.



Three 26" x 63" Pit-mounted Units

STERILIZER DESIGN

The pressure vessel is the heart of any sterilizer. PRIMUS offers simple, straight forward, design. All PRIMUS pressure vessels are constructed of solid stainless steel and are fabricated by PRIMUS in our quality controlled ASME facility. The interior chamber surface is polished to a mirror finish of $<10\mu$ in. Ra. The brilliant Pri-Mirror[®] reflective chamber finish sets the highest standard for cleanliness and offers easy spill clean-up and resistance to staining and degradation.

PRIMUS rectangular chambers eliminate the wasted space and high utility costs common to old-style cylindrical or elliptical chambers and jackets. This provides savings in operating cost and service.

All large sizes of PRIMUS sterilizers have pneumatically powered horizontal operating doors, designed to be efficient, reliable and inherently safe. To close the door, press and hold the door button,

if button is released before door is fully closed the door opens. An added safety feature, the doors stop automatically if an obstacle is encountered.

STERILIZER CYCLES

All PRIMUS steam sterilizers include Gravity, Vacuum and Liquid cycle settings. A Test/Vac cycle is provided.

General Purpose sterilizers provide for steam sterilization and decontamination of laboratory research and animal care products. Applications include wrapped and unwrapped hard goods, animal feed and bedding, cages and textiles. Liquids in self-venting and open containers are sterilized using Liquid cycle settings.

PRIMUS control platforms utilize industrial microprocessors providing accuracy and automation for all customer cycle requirements. Simplicity and versatility makes them the controller of choice for both sterilizer users and service technicians.



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PURCHASING SPECIFICATION DATA SHEET

GENERAL *(Options italicized)*

All models include Vacuum, Gravity and Liquids cycles. *A Low Temperature Flowing Steam option provides flowing steam at low temperatures for Research laboratories for specific applications.*

VESSEL MATERIAL AND CONSTRUCTION

The sterilizer will have a double-wall design providing for a fully jacketed pressure vessel. The chamber cross section will be rectangular with width and height dimensions to include:

J	26"x63"x48"	N	35"x57"x86"
K	26"x63"x76"	O	49"x57"x86"
L	35"x57"x48"	P	49"x86"x86"
M	35"x57"x60"	Q	61"x86"x86"

The vessel material will be non-laminated solid stainless steel plate/sheet. The chamber, head-ring and door plate material will be 316L stainless steel with an interior Pri-Mirror® finish of <10µ in. Ra.

DESIGN and MANUFACTURING APPROVALS

The vessel will be designed and constructed to ASME code Section VIII Division I and pressure rated for 45 PSIG and full vacuum. ASME Code Stamp and U-1 form will bear the name of PRIMUS as the specified US manufacturer.

The sterilizer will be manufactured according to Quality Management Systems which are in compliance with ISO 9001:2000, ISO 13485:2003, CMDCAS and will be UL listed and in conformance with CSA requirements.

DOOR CONSTRUCTION

A pneumatically operated horizontally sliding door will be operable from the touchpad/touchscreen push button. To close door, depress/hold door button. If door button is released while door is closing, door reverses direction and opens. In the open position, the insulated door will be secured behind a panel preventing the operator from contact with hot surfaces. An interlock will prevent cycle start unless the door is fully closed and secured.

GENERAL CONSTRUCTION

The vessel will be insulated with 1" semi-rigid high temperature fiberglass board/blanket insulation overlaid with formed aluminum paneling and mounted in a structural steel frame. The frame will be enamel coated and fitted with adjustable legs on self-centering floor pads. The fascia and side panels will be 16-gauge, type 304 stainless-steel, removable for easy service access.

QUENCH WATER CONSERVATION

To conserve water and assure effluent exhausted to drain is 140° F or below, PRIMUS provides quench water on demand for exhaust effluent.

EQUIPMENT WARRANTY

Sterilizer pressure vessels manufactured by PRIMUS are warranted against defects in materials and workmanship under normal use and operation for fifteen years where the sterilizer is continually maintained under PRIMUS service contract.

SERVICE and EQUIPMENT ACCESS

Standard service access, when facing the unit, will be from left side and top. Wiring will be laid side-by-side and mechanically secured flat against the metal insulation cover. All wiring will be clearly labeled or readily visible for visual tracing. Piping components will be threaded rigid brass and flared copper fittings, positioned with sufficient space for removal and replacement without disassembly of the entire piping assembly. Wiring and piping components will be non-proprietary, industrial grade, available through Authorized Service Agencies, local supply house, or direct from PRIMUS.

STEAM SOURCE

Steam will be from an in-house steam source in the quantity and quality specified. *Optional electric steam boiler, clean steam boiler or steam-to-steam generator may be specified. Contact PRIMUS for specific boiler information.*

CONTROLS

A PSS500 microcomputer will offer a selection of eight (8) separate programs for the sterilization of wrapped goods, hard-goods, liquids and test cycles. An optional automatic Vacuum Leak Test cycle is provided to ensure the seal integrity of the vessel and piping.

Cycle parameters may be set by the user and are adaptable to a wide range of products. Alarms are annunciated, displayed and printed. Cycle process parameters will be displayed and recorded throughout the cycle. A side-mounted control panel and a thermal printer dot-matrix technology, and 32 characters per line printing is provided. A copy of the sterilization cycle report will be available at the end of the run.



PRIMUS PSS500 PSS8 TRINITY PSS7 PRI-MATIC®
CONTROL PANELS WITH PRINTER

HVAC DATA Heat loss, at ambient of 70° F.

	MODEL	KBTU'S/HR
SINGLE DOOR: Through one wall, at fascia	J	5
	K	5
	L	6
	M	6
	N	5
	O	11
	P	19
Q	24	
SINGLE DOOR: Through one wall, service area	J	11.8
	K	12
	L	9
	M	9
	N	9
	O	11.2
	P	17
Q	19	
SINGLE DOOR: Free standing, cabinet total	J	16
	K	16
	L	16
	M	17.5
	N	18
	O	24
	P	36
Q	43	

	MODEL	KBTU'S/HR
DOUBLE DOOR: Through one wall, at fascia	J	5
	K	5
	L	6
	M	6
	N	6
	O	11
	P	19
Q	24	
DOUBLE DOOR: Through one wall, service area	J	16
	K	16
	L	15
	M	15
	N	15
	O	22
	P	33
Q	39	
DOUBLE DOOR: Through two walls, at each fascia	J	5
	K	5
	L	6
	M	6
	N	6
	O	11
	P	19
Q	24	
DOUBLE DOOR: Through two walls, service area	J	10
	K	10
	L	8
	M	10
	N	10
	O	10
	P	14
Q	15.5	

TECHNICAL DATA SHEET

SHIPPING DIMENSIONS, CUBAGE & WEIGHTS

Model Sterilizer Size inches/millimeters	J 26" x 63" x 48" 660.4 x 1600.2 x 1219.2	K 26" x 63" x 76" 660.4 x 1600.2 x 1930.4	L 35" x 57" x 48" 889 x 1447.8 x 1219.2	M 35" x 57" x 60" 889 x 1447.8 x 1524
Shipping Dimensions, Single Door ²	58 x 89.5 x 59.5 1473.2 x 2273.3 x 1511.3	58 x 89.5 x 87.5 1473.2 x 2273.3 x 2222.5	68.63 x 82.5 x 59.75 1743 x 2089.2 x 1517.7	68.63 x 82.5 x 71.75 1743 x 2089.2 x 1822.5
Shipping Dimensions, Double Door ²	58 x 89.5 x 60 1473.2 x 2273.3 x 1524	58 x 89.5 x 88 1473.2 x 2273.3 x 2235.2	68.63 x 82.5 x 60.75 1743 x 2089.2 x 1543.1	68.63 x 82.5 x 72.75 1743 x 2089.2 x 1847.9
Overall Width Dimensions	79 / 2006.6	79 / 2006.6	105 / 2667	105 / 2667
Knockdown Width Dimensions ³	40.5 / 1028.7	40.5 / 1028.7	48.31 / 1227.1	48.31 / 1277.1
Weight, Single Door	CONTACT PRIMUS FOR WEIGHTS			
Weight, Double Door				
Crated Weight (Additional)	VAN DELIVERY ONLY			
Crated Dimensions	42 x 92 x 61 1066.8 x 2336.8 x 1549.4	42 x 92 x 89 1066.8 x 2336.8 x 2260.6	81 x 87 x 74 2057.4 x 2209.8 x 1879.6	81 x 87 x 86 2057.4 x 2209.8 x 2184.4
Crated Cube	137 cu. ft. / 4 cu. m.	200cu. ft. / 6 cu. m.	302 cu. ft. / 9 cu. m.	350 cu. ft. / 9.9 cu. m.
Loading Equipment	152 lbs/ 69 kg	240 lbs/ 109kg	183 lbs/ 83 kg	380 lbs/ 172 kg
Boiler	785 lbs/ 356 kg	790 lbs/ 359 kg	785 lbs/ 356 kg	790 lbs/ 358 kg

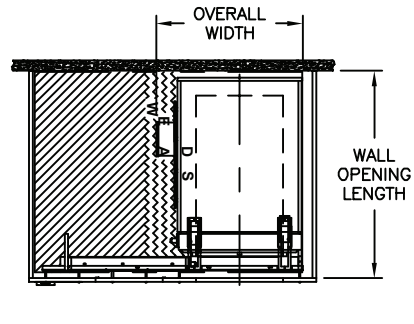
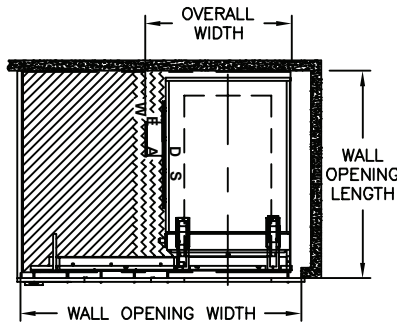
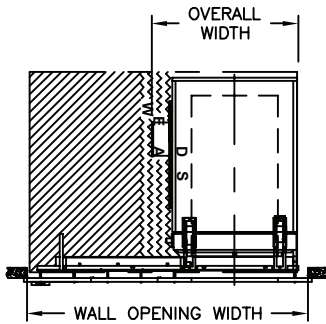
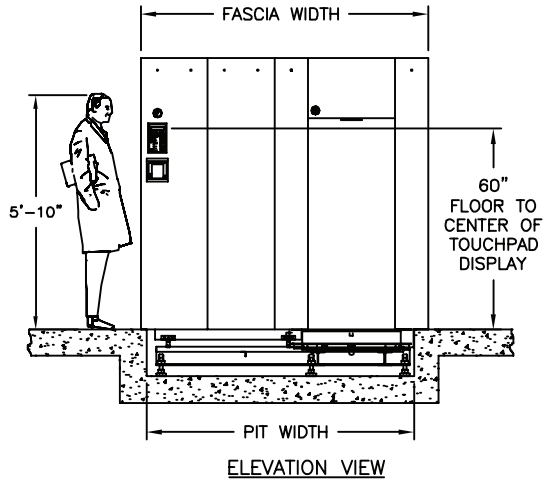
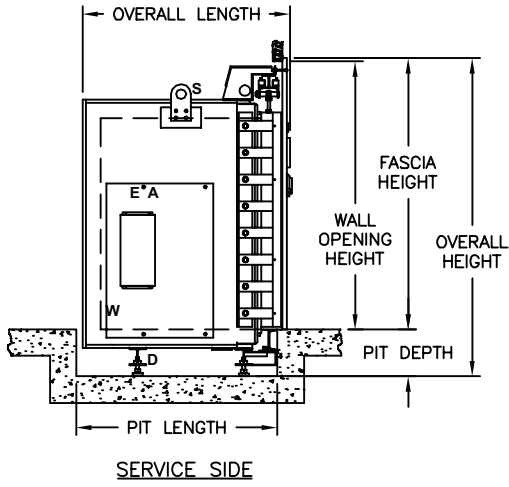
Model Sterilizer Size inches/millimeters	N 35" x 57" x 86" 889 x 1447.8 x 2184.4	O 49" x 57" x 86" 1244.6 x 1447.8 x 2184.4	P 49" x 86" x 86" 1244.6 x 2184.4 x 2184.4	Q 61" x 86" x 86" 1549.4 x 2184.4 x 2184.4
Shipping Dimensions, Single Door ²	69.5 x 82.5 x 97.5 1765.3 x 2089.2 x 2476.5	83.63 x 82.63 x 101.2 2142.2 x 2098.8 x 2570.2	91 x 119.5 x 101.5 2311.4 x 3035.3 x 2578.1	103 x 119.5 x 101.5 2616.2 x 3035.3 x 2578.1
Shipping Dimensions, Double Door ²	69.5 x 82.5 x 98.5 1765.3 x 2089.2 x 2501.9	83.63 x 82.63 x 102.2 2124.2 x 2098.8 x 2595.9	91 x 119.5 x 102.5 2311.4 x 3035.3 x 2603.5	103 x 119.5 x 102.5 2616.2 x 3035.3 x 2603.5
Overall Width Dimensions	105 / 2667	126 / 3200.4	133.5 / 3390.9	145.5 / 3695.7
Knockdown Width Dimensions ³	48.31 / 1227.1	62.38 / 1584.5	70.63 / 1794	82.63 x 2098.8
Weight, Single Door	CONTACT PRIMUS FOR WEIGHTS			
Weight, Double Door				
Crated Weight (Additional)	VAN DELIVERY ONLY		FLAT BED DELIVERY	
Crated Dimensions	82 x 87 x 112 2082.8 x 2209.8 x 2844.8	96 x 87 x 116 2438.4 x 2209.8 x 2946.4	104 x 125 x 117 2641.6 x 3175 x 2971.8	116 x 125 x 117 2964.4 x 3175 x 2971.8
Crated Cube	494 cu ft/ 14 cu m	561 cu ft/ 16 cu m	880 cu ft/ 25 cu m	981 cu ft/ 28 cu m
Loading Equipment	408 lbs/ 185 kg	420 lbs/ 191 kg	460 lbs/ 209 kg	528 lbs/ 240 kg
Boiler	CONTACT PRIMUS			

1. Door beams on all units may be split for shipping purpose.
2. Shipping dimensions are measured to the edge of the heat exchanger and include plumbing on, split beams removed, where applicable, front stainless panel and printer removed.



PRIMUS General Purpose - Large Sized Autoclaves

SINGLE DOOR



PLAN VIEWS

TYPICAL ACCEPTED RANGES

- Service access space
- Typical floor drain and ancillary equipment area.

*Refer to General Arrangement (GA) drawings for details and final connection point to utility services (S-Steam, W-Water, D-Drain, E-Electrical, A-Air).



PRIMUS General Purpose - Large Sized Autoclaves

VOLUME/DIMENSIONS CHART SINGLE DOOR

TECHNICAL DATA SHEET

MODEL	J	K	L	M
Chamber Size (w x h x l) inches/millimeters	26 x 63 x 48 660 x 1600 x 1219	26 x 63 x 76 660 x 1600 x 1930	35 x 57 x 48 889 x 1448 x 1219	35 x 57 x 60 889 x 1448 x 1524
Chamber Capacity	45.5 cu. ft. / 1.29 cu. m.	72.0 cu. ft. / 2.04 cu. m.	55.4 cu. ft. / 1.57 cu. m.	69.3 cu. ft. / 1.96 cu. m.
Overall Width	40.25 / 1022.35	40.25 / 1022.35	52.31 / 1329	52.31 / 1329
Overall Height ¹	109.00 / 2768.6	109.00 / 2768.6	96.00 / 2438	96.00 / 2438.
Overall Length (SD) ²	64.00 / 1625.6	92.00 / 2336.8	63.50 / 1613	75.50 / 1918
Wall Opening Width ³	86.00 / 2184	86.00 / 2184	105.00 / 2667	105.00 / 2667
Wall Opening Height	94.00 / 2387.6	94.00 / 2387.6	83.00 / 2108	83.00 / 2108
Wall Opening Length	62.25/ 1581.15	90.25 / 2292.35	63.50 / 1613	75.50 / 1918
Fascia Width ¹	88.00 / 2235	88.00 / 2235	107.00 / 2718	107.00 / 2718
Fascia Height	95.00 / 2413	95.00 / 2413	84.00 / 2134	84.00 / 2134

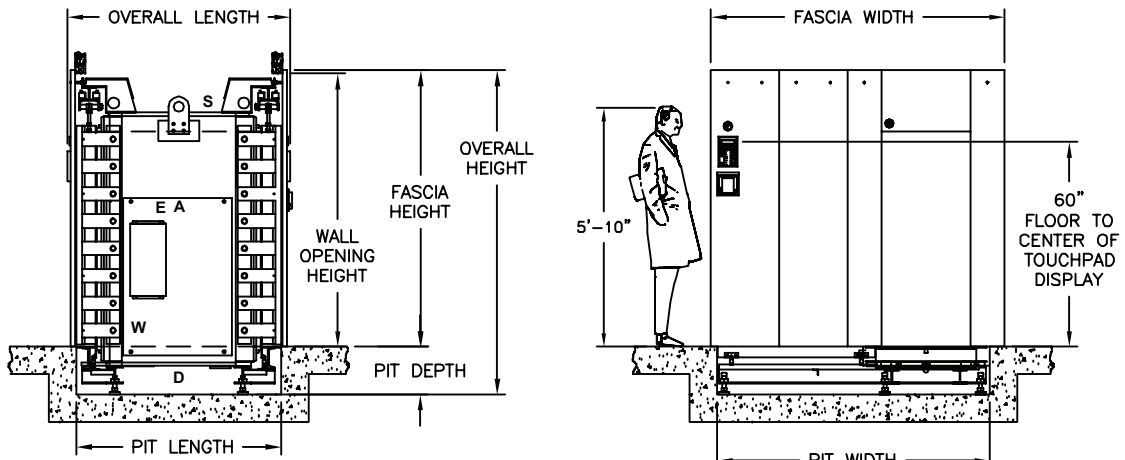
MODEL	N	O	P	Q
Chamber Size (w x h x l) inches/millimeters	35 x 57 x 86 889 x 1448 x 2184	49 x 57 x 86 1245 x 1448 x 2184	49 x 86 x 86 1245 x 2184 x 2184	61 x 86 x 86 1549 x 2184 x 2184
Chamber Capacity	99.3 cu. ft. / 2.81 cu. m.	139.0 cu. ft. / 3.94 cu. m.	209.7 cu. ft. / 5.94 cu. m.	261.1 cu. ft. / 7.39 cu. m.
Overall Width	52.31 / 1329	66.31 / 1684	73.81 / 1875	85.81 / 2180
Overall Height ¹	96.00 / 2438	96.00 / 2438	137.00 / 3480	137.00 / 3480
Overall Length (SD) ²	101.50 / 2578	105.25 / 2673.4	105.38 / 2677	105.38 / 2677
Wall Opening Width ³	105.00 / 2667	133.00 / 3378	138.00 / 3505.2	174.00 / 4420
Wall Opening Height	83.00 / 2108	83.00 / 2108	124.00 / 3149.6	124.00 / 3149.6
Wall Opening Length	101.50 / 2578	105.50 / 2680	107.50 / 2730	107.50 / 2730
Fascia Width ¹	107.00 / 2718	135.00 / 3429	140.00 / 3556	176.00 / 4470
Fascia Height	84.00 / 2134	84.00 / 2134	125.00 / 3175	125.00 / 3175

1. Fascia extends 1" beyond wall opening on each side overlapping the wall and top sealing the opening.
2. Allow minimum 2" clearance at rear of recessed unit only. Cabinet side models have rear clearance built in.
3. Contact PRIMUS for alternative wall opening.
4. Standard Left Side Service/equipment access shown. Optional right side access is available.



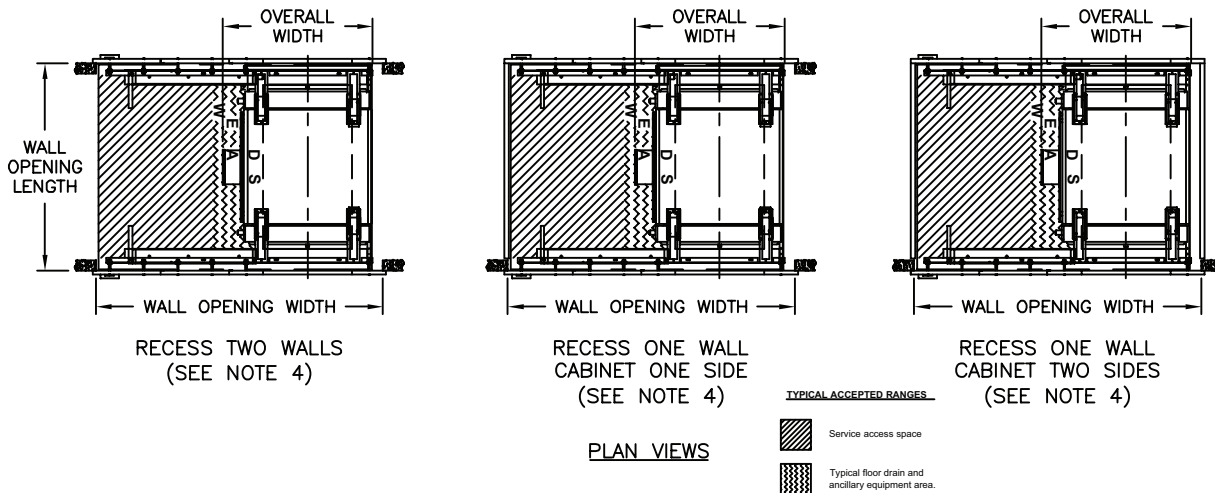
PRIMUS General Purpose - Large Sized Autoclaves

DOUBLE DOOR



SERVICE SIDE

ELEVATION VIEW



RECESS TWO WALLS
(SEE NOTE 4)

RECESS ONE WALL
CABINET ONE SIDE
(SEE NOTE 4)

RECESS ONE WALL
CABINET TWO SIDES
(SEE NOTE 4)

PLAN VIEWS

TYPICAL ACCEPTED RANGES
 Service access space
 Typical floor drain and ancillary equipment area.

TECHNICAL DATA SHEET

*Refer to General Arrangement (GA) drawings for details and final connection point to utility services (S-Steam, W-Water, D-Drain, E-Electrical, A-Air).



PRIMUS General Purpose - Large Sized Autoclaves

VOLUME/DIMENSIONS CHART DOUBLE DOOR

TECHNICAL DATA SHEET

MODEL	J	K	L	M
Chamber Size (w x h x l) inches/millimeters	26 x 63 x 48 660 x 1600 x 1219	26 x 63 x 76 660 x 1600 x 1930	35 x 57 x 48 889 x 1448 x 1219	35 x 57 x 60 889 x 1448 x 1524
Chamber Capacity	45.5 cu. ft. / 1.29 cu. m.	72.0 cu. ft. / 2.04 cu. m.	55.4 cu. ft. / 1.57 cu. m.	69.3 cu. ft. / 1.96 cu. m.
Overall Width	40.25 / 1022.35	40.25 / 1022.35	52.31 / 1329	52.31 / 1329
Overall Height ¹	109.00 / 2768.6	109.00 / 2768.6	96.00 / 2438	96.00 / 2438
Overall Length (DD)	70.13 / 1781.18	98.13 / 2492.5	67.75 / 1720.9	79.75 / 2025.7
Wall Opening Width ²	86.00 / 2184	86.00 / 2184	105.00 / 2667	105.00 / 2667
Wall Opening Height	94.00 / 2387.6	94.00 / 2387.6	83.00 / 2108	83.00 / 2108
Wall Opening Length	62.44 / 1585.98	90.44 / 2297.18	62.50 / 1587	74.50 / 1892
Fascia Width ¹	88.00 / 2235	88.00 / 2235	107.00 / 2718	107.00 / 2718
Fascia Height	95.00 / 2413	95.00 / 2413	84.00 / 2134	84.00 / 2134

MODEL	N	O	P	Q
Chamber Size (w x h x l) inches/millimeters	35 x 57 x 86 889 x 1448 x 2184	49 x 57 x 86 1245 x 1448 x 2184	49 x 86 x 86 1245 x 2184 x 2184	61 x 86 x 86 1549 x 2184 x 2184
Chamber Capacity	99.3 cu. ft. / 2.81 cu. m.	139.0 cu. ft. / 3.94 cu. m.	209.7 cu. ft. / 5.94 cu. m.	261.1 cu. ft. / 7.39 cu. m.
Overall Width	52.31 / 1329	66.31 / 1684	73.81 / 1875	85.81 / 2180
Overall Height ¹	96.00 / 2438	96.00 / 2438	137.00 / 3480	137.00 / 3480
Overall Length (DD)	105.75 / 2686.1	109.38 / 2778	109.75 / 2788	109.75 / 2788
Wall Opening Width ²	105.00 / 2667	133.00 / 3378	138.00 / 3505.2	174.00 / 4420
Wall Opening Height	83.00 / 2105	83.00 / 2105	124.00 / 3149.6	124.00 / 3149.6
Wall Opening Length	100.50 / 2553	104.12 / 2645	104.38 / 2651	104.38 / 2651
Fascia Width ¹	107.00 / 2718	135.00 / 3429	140.00 / 3556	176.00 / 4470
Fascia Height	84.00 / 2134	84.00 / 2134	125.00 / 3175	125.00 / 3175

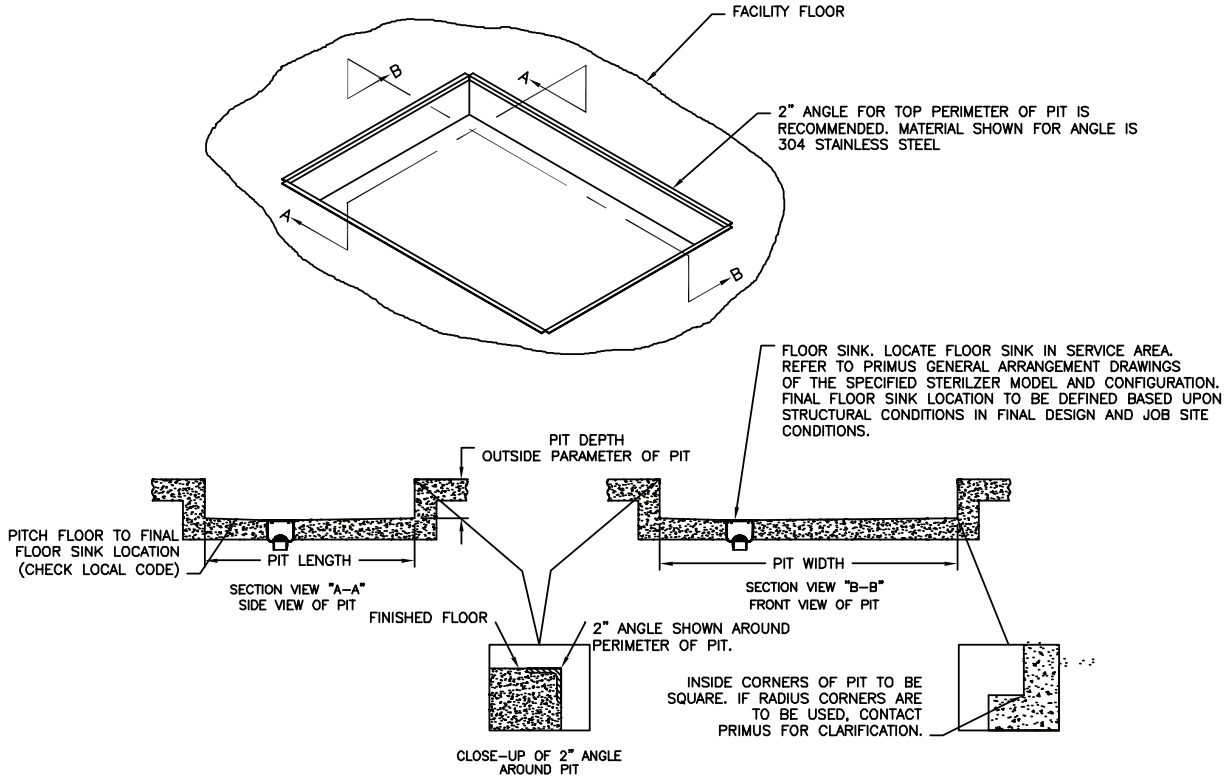
1. Fascia extends 1" beyond wall opening on each side overlapping the wall and top sealing the opening.
2. Contact PRIMUS for alternative wall opening.
3. Standard Left Side Service/equipment access shown. Optional right side access is available.



PRIMUS General Purpose - Large Sized Autoclaves

TECHNICAL DATA SHEET

PIT INSTALLATION DETAILS



Drawing is a general example of PRIMUS' pit installation. Refer to PRIMUS' General Arrangement (GA) drawings for exact dimensions and pit installation details. Prior to installing your PRIMUS sterilizer verify the pit dimensions are correct with the PRIMUS GA Drawing, ensure the pit is square, clean and sealed. *Contact PRIMUS for further pit installation information.*

PIT DIMENSIONS CHART

MODEL	J	K	L	M
Chamber Size (w x h x l) inches/millimeters	26 x 63 x 48 660 x 1600 x 1219	26 x 63 x 76 660 x 1600 x 1930	35 x 57 x 48 889 x 1448 x 1219	35 x 57 x 60 889 x 1448 x 1524
Pit Depth	12.00 / 304.8	12.00 / 304.8	12.00 / 304.8	12.00 / 304.8
Pit Length (SD)	61.00 / 1569.4	89.00 / 2260.6	61.00 / 1549.4	73.00 / 1879.6
Pit Length (DD)	59.50 / 1511.3	87.50 / 2222.5	59.00 / 1698.6	71.00 / 1803.4
Pit Width	81.00 / 2057	81.00 / 2057	98.00 / 2489	98.00 / 2489

MODEL	N	O	P	Q
Chamber Size (w x h x l) inches/millimeters	35 x 57 x 86 889 x 1448 x 2184	49 x 57 x 86 1245 x 1448 x 2184	49 x 86 x 86 1245 x 2184 x 2184	61 x 86 x 86 1549 x 2184 x 2184
Pit Depth	12.00 / 304.8	12.00 / 304.8	12.00 / 304.8	12.00 / 304.8
Pit Length (SD)	99.00 / 2514.6	101.00 / 2565.4	101.00 / 2565.4	101.00 / 2565.4
Pit Length (DD)	97.00 / 2463.8	97.88 / 2486.5	98.50 / 2501.9	98.50 / 2501.9
Pit Width	98.00 / 2489	130.00 / 3302	138.00 / 3505.2	165.00 / 4191

NOTE: The industry has set 12" as an acceptable pit depth dimension. PRIMUS recommends 12" to 18" depending on the sterilizer size specified to facilitate easier serviceability and maintenance.

ARCHITECTURAL NOTES:

1. Allow sufficient space for traps, shut-off's, filters and other utility supply components.
2. Utility (service disconnects) shall be provided and installed "By Others".
3. Building or structure modifications to accommodate the sterilizer, as well as, sterilizer shoring, rigging, cribbing and/or crane requirements into the facility performed "By Others".
4. Provide maximum mechanical and service access space (refer to page 4 and 6), additional space required when boiler specified. See General Arrangement drawing for placement of ancillary equipment and service access.
5. Some options affect utility services and overall dimensions.
6. Water Quality - refer to page 12.
7. The Manufacturer's Equipment Warranty does not cover failure due to improper utility provisions.
8. Drawings not to scale.
9. Wall thickness must be provided on single and double door models recessed through 1 wall, with cabinet sides.
10. Electric Vacuum Pump is standard on Models N, O, P and Q.
11. Floor under sterilizer must be water tight and sloped to the drain.

UTILITY SERVICES

Provide utility services within 6'-0" of final connection to sterilizer. Optimum sterilizer performance requires the specified utilities.

MODEL	STEAM (S) Building Steam Supply • Pipe Size: See Below • Quality: Condensate free 97% to 100% saturated vapor (suitably trapped to ensure dry steam and filtered to remove particulates) • Pressure: 50-80 PSIG Dynamic Note: 1.) Steam-to-steam generator requires minimum pressure 65 PSIG house steam		WATER (W) Cold Water Supply • Pipe Size: See Below • Temperature: < 70° F • Pressure: 50-70 PSIG Dynamic		DRAIN (D) Building Drain System Minimum 2" • Location: Locate floor sink in service area Note: 1.) Exhaust discharge is cooled to < 140°F 2.) 12" x 12" x 8" floor sink is recommended by PRIMUS 3.) Floor should be sloped to drain		Air Instrument Air • Connection: See Below • Quality: Dry and oil free • Pressure: 60-80 PSI Dynamic		ELECTRICAL (E) Building Power Supply • Volts: 110 • Phase: Single • Amps: 10 Note: Additional circuits are required for ancillary and optional equipment i.e., vacuum pump, boost pump, boiler, etc.	
	NPT	LBS/HR (KG/HR)	NPT	GPM (MAX) (Liter)	NPT (Discharge Pipe Size)		NPT			
J	1"	364.0 (165.1)	3/4"	14 (53)	1"		1/4"			
K	1"	480.0 (217.72)	1"	25 (95)	1 1/4"		1/4"			
L	1"	430.0 (195.0)	1"	25 (95)	1 1/4"		1/4"			
M	1"	480.0 (217.72)	1"	25 (95)	1 1/4"		1/4"			
N	1"	685.0 (310.7)	1"	25 (95)	1 1/4"		1/2"			
O	1"	890.0 (403.7)	1"	25 (95)	1 1/4"		1/2"			
P	1 1/2"	1210.0 (548.85)	1 1/2"	30 (114)	1 1/2"		1/2"			
Q	1 1/2"	1440.0 (653.2)	2"	30 (114)	1 1/2"		1/2"			

ELECTRIC BOILERS

GEB Electric Heated Boiler - Carbon steel. Uses house supplied water. Includes feedwater boost pump.

GEBC Electric Heated Boiler - Stainless steel construction for clean steam generation. Includes stainless steel feedwater boost pump.

NOTE: Stainless Steel Boilers shall be operated using only deionized water, having a maximum conductance of 1 microSeimen per cm ($1\mu\text{S}/\text{cm}$) [minimum specific resistivity of 1 megohm per cm ($1\text{M}\Omega/\text{cm}$)].

MODEL		J	K	L	M
Chamber Size (w x h x l) inches/millimeters		26 x 63 x 48 660.4 x 1600 x 1219	26 x 63 x 76 660.4 x 1600 x 1930	35 x 57 x 48 889 x 1148 x 1219	35 x 57 x 60 889 x 1448 x 1524
Boiler Size	kW/Hr.	144.0	180.0	158.0	180.0
Boiler Steam Output	lbs./Hr	433.0	542.0	475.0	542.0
Stand Alone	Model	EB-J	EB-K	EB-L	EB-M
V.A.C. 208, 3 Ph	Amperes	400	N/A	N/A	N/A
V.A.C.240, 3 Ph	Amperes	347	434	379	434
V.A.C. 480, 3 Ph	Amperes	173	217	190	217
V.A.C. 110, 60 Hz. ¹	Amperes	10	10	10	10
MODEL		N	O	P	Q
Chamber Size (w x h x l) inches/millimeters		35 x 57 x 86 889 x 1448 x 2184	49 x 57 x 86 1245 x 1448 x 2184	49 X 86 X 86 1245 x 2184 x 2184	61 X 86 X 86 889 X 1448 X 1524
Boiler Size	kW/Hr.	240.0	360.0	450.0	540.0
Boiler Steam Output	lbs./Hr	723.0	1054.0	1355.0	1656.0
Stand Alone	Model	EB-N	EB-O	EB-P	EB-Q
V.A.C. 208, 3 Ph	Amperes	N/A	N/A	N/A	N/A
V.A.C.240, 3 Ph	Amperes	578	N/A	N/A	N/A
V.A.C. 480, 3 Ph	Amperes	289	434	542	650
V.A.C. 110, 60 Hz. ¹	Amperes	10	10	10	10

1. Controls Current
N/A - Not Available

