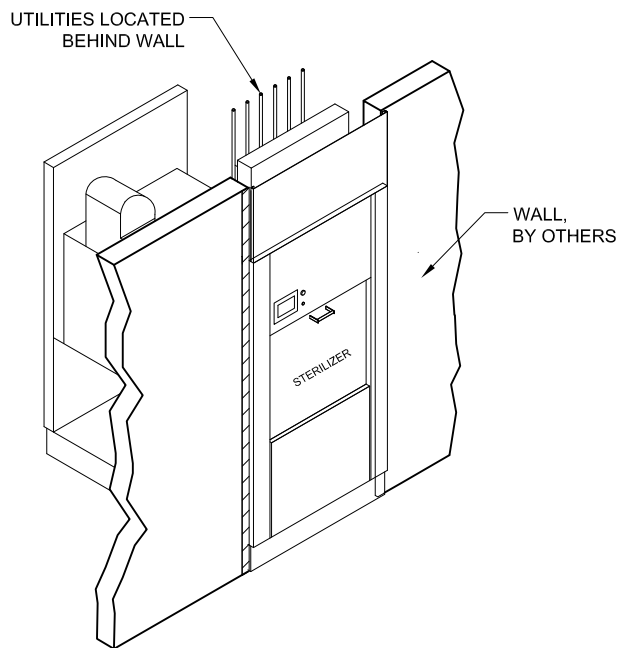


STAND ALONE UNIT



RECESSED UNIT

**Belimed**

Infection Control

2284 Clements Ferry Road, Charleston, SC 29492  
Tel: (800) 457-4117 Web: www.belimed.us

**BELIMED 509-VS1E**  
VERTICAL STERILIZER

Typical installation of a Belimed 509-VS1E Sterilizer


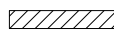
Dwg. No. :	CUT-509-VS1E	Rev. :	A
Drawn By :	TJC	Date :	6/24/11
Scale :	N.T.S.	Page :	1 of 5

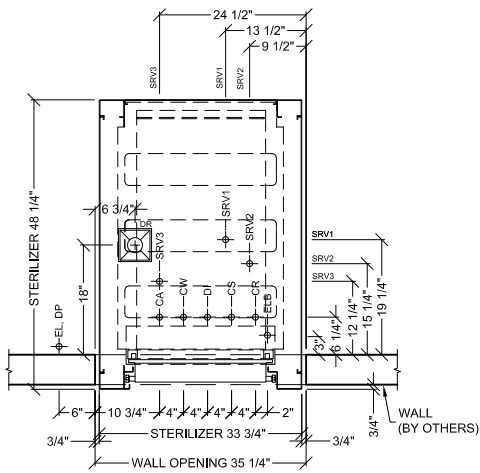


# LEGEND

 SERVICE SHUT-OFF VALVE, BY OTHERS

## HATCH TYPES

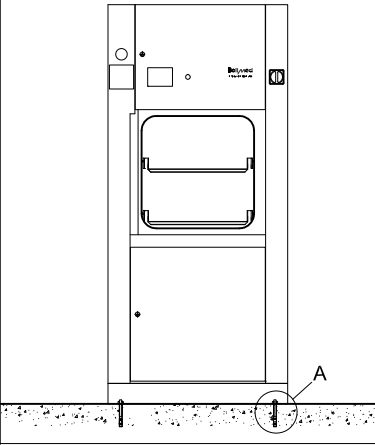
-  STAINLESS STEEL TRIM, BY BELIMED
-  STAINLESS STEEL ENCLOSURES, BY BELIMED



CLEAN SIDE

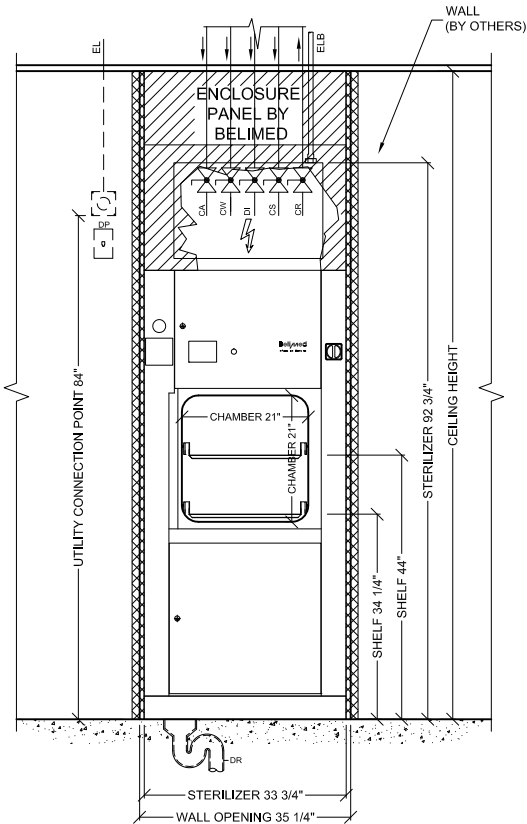
\*SEE TECHNICAL SPECIFICATIONS ON PAGE 4

PLAN VIEW

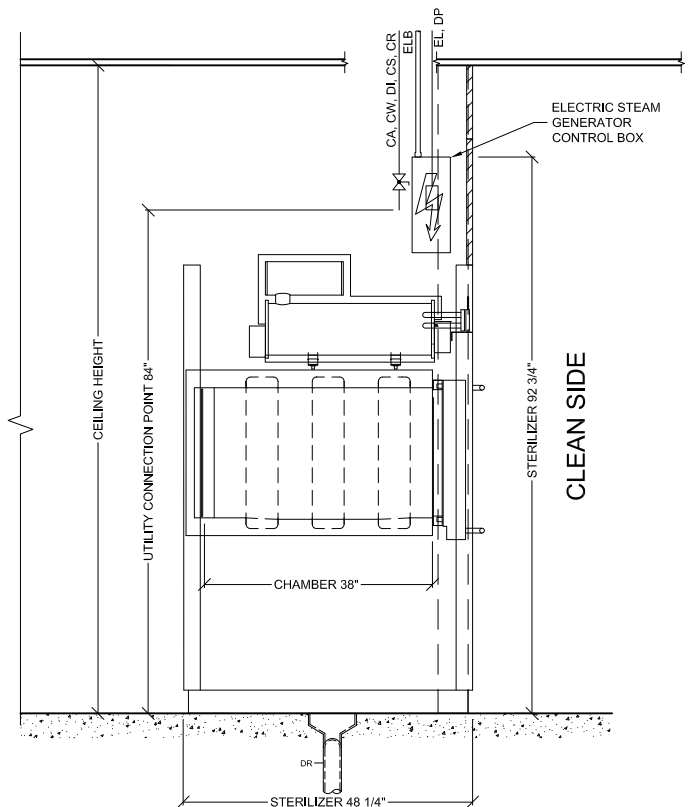


DETAIL "A"

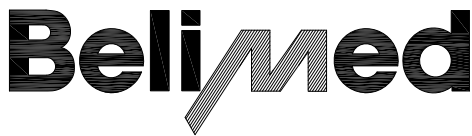
TYPICAL SEISMIC ANCHORAGE DETAIL



FRONT ELEVATION



SIDE ELEVATION



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# BELIMED 509-VS1E

VERTICAL STERILIZER

TECHNICAL DRAWING

Typical installation of a recessed Belimed 509-VS1E Sterilizer.

Dwg. No. : CUT-509-VS1E

Rev. : A

Drawn By: TJC

Date: 6/24/11

Scale: 3/8" = 1'

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# 509-VS1E STERILIZER (W/ INTERGRATED BOILER) - TECHNICAL SPECIFICATIONS

## REQUIRED INPUTS

Symbol	Description	Value	Utility Notes
DI	<i>Utility:</i>	<b>Deionized Water</b>	Deionized (DI) or Reverse Osmosis (RO) water can be used with a conductivity <30 µS/cm
	<i>Connection Size/Type:</i>	1/4 inch / NPT	
	<i>Pressure:</i>	Min: 30 Max: 70 psig	
	<i>Peak Consumption:</i>	0.44 gal/min	
	<i>*Consumption per Load:</i>	2.5 gal	
CW	<i>Utility:</i>	<b>Cold Water</b>	Cold water is used to prime the condensate pump and cool the condensate. Colder water temperatures will result in less water consumption. Water should be softened to 0-60 ppm. Use sediment filter similar to Grainger part No. 4BA87.
	<i>Connection Size/Type:</i>	1/2 inch / NPT	
	<i>Pressure:</i>	Min: 30 Max: 70 psig	
	<i>Peak Consumption:</i>	4.4 gal/min	
	<i>*Consumption per Load:</i>	40 gal	
CA	<i>Utility:</i>	<b>Compressed Air</b>	Air must be dry and oil free. Used to operate pneumatic control system.
	<i>Connection Size/Type:</i>	1/4 inch / NPT	
	<i>Pressure:</i>	Min: 70 Max: 100 psig	
	<i>Peak Consumption:</i>	1 CFM	
	<i>*Consumption per Load:</i>	10 ft <sup>3</sup>	
EL	<i>Utility:</i>	<b>Electric</b>	4x4 Junction Box with Receptacle: NEMA 15-20R receptacle. Grainger part No. 5C793.
	<i>Connection Type:</i>	Receptacle	
	<i>Voltage (Nominal):</i>	208 VAC	
	<i>Voltage (Phase):</i>	3 Phase	
	<i>Voltage (Frequency):</i>	60 Hz	
	<i>Circuit Protection:</i>	10 Amps	
	<i>Peak Consumption:</i>	1.6 Kw	
	<i>*Consumption per Load:</i>	0.5 kWh	
ELB	<i>Utility:</i>	<b>Electric for boiler</b>	
	<i>Connection Type:</i>	1 1/4 inch / EMT	
	<i>Voltage (Nominal):</i>	480 VAC	
	<i>Voltage (Phase):</i>	3 Phase	
	<i>Voltage (Frequency):</i>	60 Hz	
	<i>Circuit Protection:</i>	50 Amps	
	<i>Peak Consumption:</i>	30 Kw	
	<i>*Consumption per Load:</i>	8 kWh	
DR	<i>Utility:</i>	<b>Open Drain</b>	Provide flush mounted floor sink and trap per local code.
	<i>Connection Size/Type:</i>	2 inch / Indirect Drain	
	<i>Discharge Flow Rate:</i>	4.6 gal/min	
	<i>*Consumption per Load:</i>	42.5 gal	
HR	<i>Medium:</i>	<b>Heat Radiation</b>	1 kW dissipated in service room with temperature 86°F.
	<i>Radiation:</i>	1 kW	
SRV1	<i>Utility (Chamber):</i>	<b>Safety Pressure Relief Valve</b>	Provide connection to safety relief valve and pipe to drain, atmosphere, or as required by local code.
	<i>Outlet Size/Type:</i>	1 inch / FNPT	
SRV2	<i>Utility (Jacket):</i>	<b>Safety Pressure Relief Valve</b>	Provide connection to safety relief valve and pipe to drain, atmosphere, or as required by local code.
	<i>Outlet Size/Type:</i>	1 inch / FNPT	
SRV3	<i>Utility (Boiler):</i>	<b>Safety Pressure Relief Valve</b>	Provide connection to safety relief valve and pipe to drain, atmosphere, or as required by local code.
	<i>Outlet Size/Type:</i>	1 inch / FNPT	

CONTINUED ON PAGE 5



## BELIMED 509-VS1E VERTICAL STERILIZER

TECHNICAL SPECIFICATIONS	Dwg. No.: CUT-509-VS1E	Rev.: A
Technical Specifications for the installation a Belimed 509-VS1E Sterilizer.	Drawn By: TJC	Date: 6/24/11
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**Optional utilities for chilled water cooling** (used for reduction of cold water consumption).

CS	<b>Utility:</b>	<b>Chilled Water Supply</b>	
	<b>Connection Size/Type:</b>	3/4 inch / NPT	
	<b>Pressure:</b>	Min: 30 Max: 70 psig	
	<b>Peak Cooling Load:</b>	8.0 kW	
	<b>*Consumption per Load:</b>	24.6 kBTU	
CR	<b>Utility:</b>	<b>Chilled Water Return</b>	Pressure difference $\Delta P$ CS/CR must be greater than 7 PSIG.
	<b>Connection Size/Type:</b>	3/4 inch / NPT	

**PHYSICAL SPECIFICATIONS**

	<b>Parameter:</b>	<b>Carry-In Dimensions</b>	Machine Alone (i.e. removed from packaging)
	<b>Height:</b>	79.5 in	
	<b>Width:</b>	33.7 in	
	<b>Length:</b>	48.3 in	
	<b>Parameter:</b>	<b>Weights</b>	Transport Weight = Machine + Crating Operating Weight = Machine + Load
	<b>Sterilizer Model:</b>	509-VS1E	
	<b>Transport Weight:</b>	1874 lbs	
	<b>Operating Weight:</b>	1543 lbs	

\*Consumptions calculated under pre-vac cycle at 270° F and water temperature of 68° F.

**Additional Information:**

- NPT = Male pipe thread -FNPT = Female pipe thread
- Others must provide service connections for all utility supplies..
- Others must provide back flow prevention for water supply.
- All utility supplies and connections are other's responsibility.

TS-509VS1E/VS2E\_RevA

**Requirements at Sterilizer(s) with TCP/IP connection**

<b>Symbol</b>	<b>Utility</b>	<b>Description</b>	
DP	Data Port	<b>Connection Method:</b>	TCP/IP Ethernet to hospital network
		<b>Connection Quantity:</b>	One (1) RJ45 Ethernet port per sterilizer
		<b>Facility Wiring:</b>	*Cat-5 or Cat-6 wire
		<b>Location:</b>	Ethernet port should be located within 5 ft of machine
			Preferred Ethernet port location is in the enclosed service area of the sterilizer
		<b>Final Connection:</b>	Belimed provided patch cables for final connection
		<b>Port IP setup:</b>	Each RJ45 Ethernet Port with individual static IP address

\* Decision depends upon facility's networking preference. Please contact Belimed with any questions.

TS-ICS8535-ST\_RevB



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**BELIMED 509-VS1E**  
VERTICAL STERILIZER

TECHNICAL SPECIFICATIONS	Dwg. No. : CUT-509-VS1E	Rev. : A
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