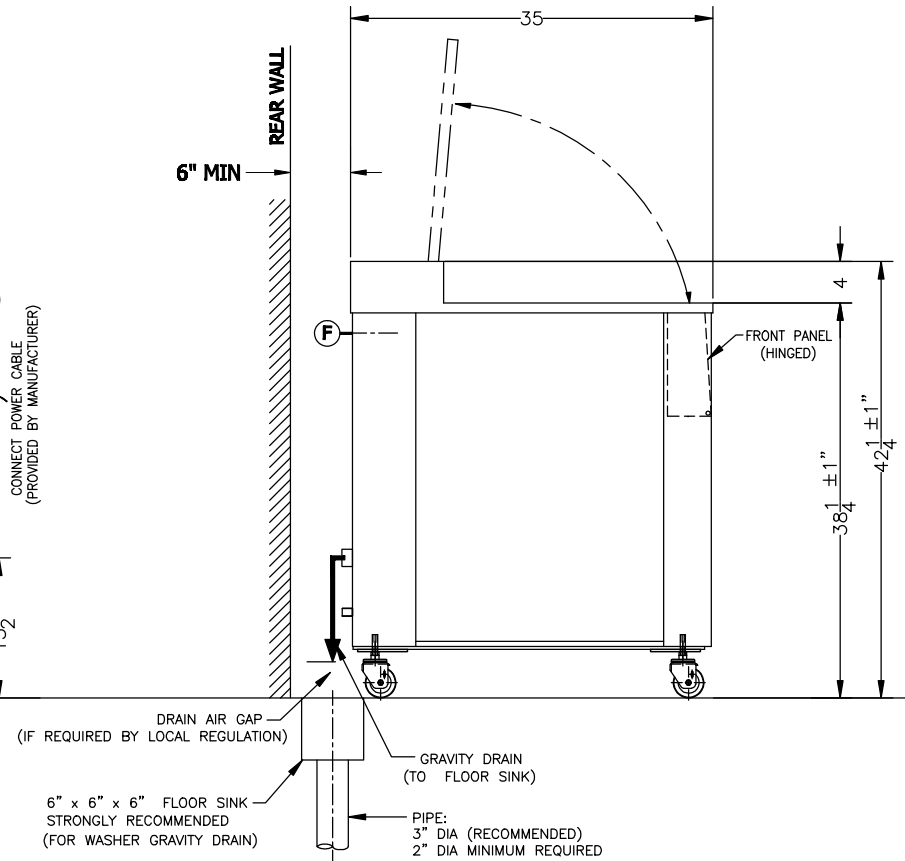
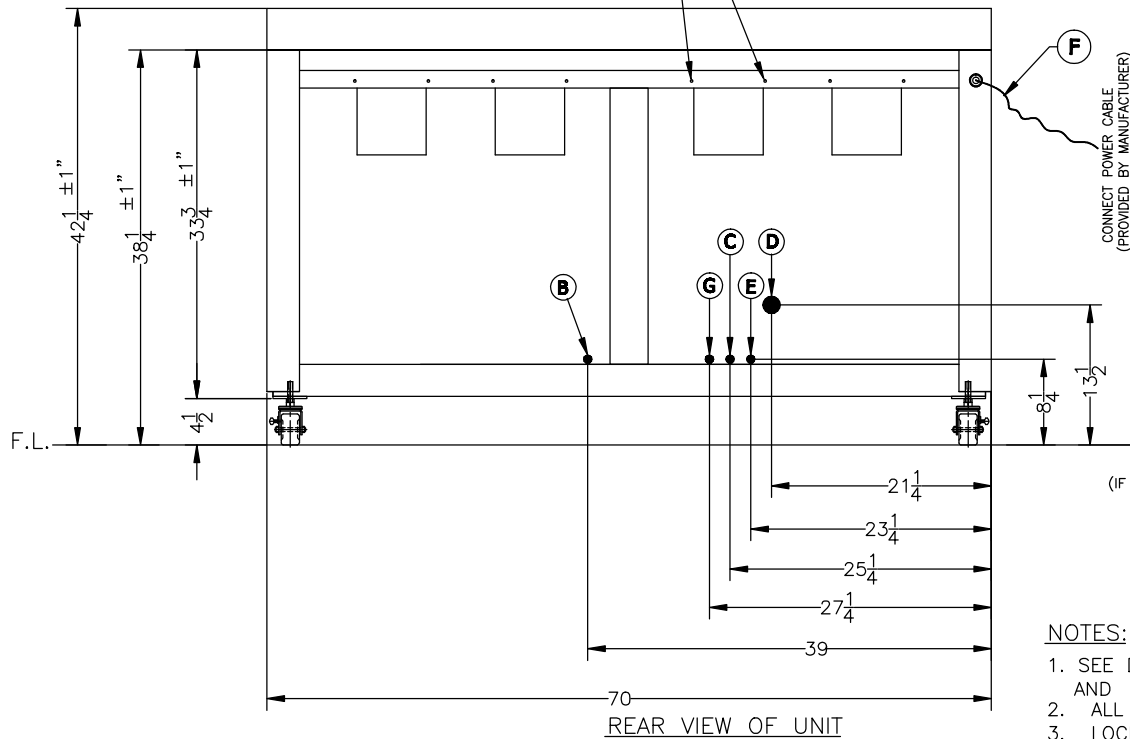


**UTILITY REQUIREMENTS:**

- B - COLD WATER : 1/2" CPVC, (DRYER CONDENSER)  
 C - TAP WATER: (SPRAY RINSE)  
 D - DRAIN: 1 1/4" CPVC  
 E - PURE WATER: 1/2" CPVC MALE  
 F - POWER CONNECTION:  
 CONNECT POWER CABLE TO  
 CUSTOMER WALL DISCONNECT  
 G - AIR (ENDO ) 1/2" NPT BRASS

**CAUTION:**  
 PRIOR TO INSTALLATION  
 REMOVE BOLTS, NUTS AND SHIPPING BRACKET  
 FOR COUNTERWEIGHTS FOR EACH LID



**NOTES:**

1. SEE DOCUMENT: INSTALLATION SPECIFICATIONS AND UTILITY REQUIREMENTS
2. ALL UTILITIES LOCATION DIMENSIONS ARE ± 1"
3. LOCK CASTERS AFTER INSTALLING THE UNIT IN PLACE

**CAUTION !**

PRIOR TO INSTALLATION  
 REMOVE BOLTS, NUTS AND SHIPPING BRACKETS  
 FOR COUNTERWEIGHTS AT UNIT REAR.

SHT. 1 OF 6

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) ALSO REFER TO GENERAL NOTES APPLICABLE TO EQUIPMENT DRAWINGS DWG. NO. 62941-091		CAVIWAVE 20-WRD (L-R) ULTRASONIC CLEANER		EQUIPMENT DRAWING NO. 764335-354	
STERIS STERIS Corporation Mentor, OH		GENERAL INSTALLATION LAYOUT DWG.		ITEM _____ LOCATION(S) _____	

## - UTILITY REQUIREMENTS:

B - COLD WATER : 1/2" CPVC, (DRYER CONDENSER)

C - TAP WATER: (SPRAY RINSE)

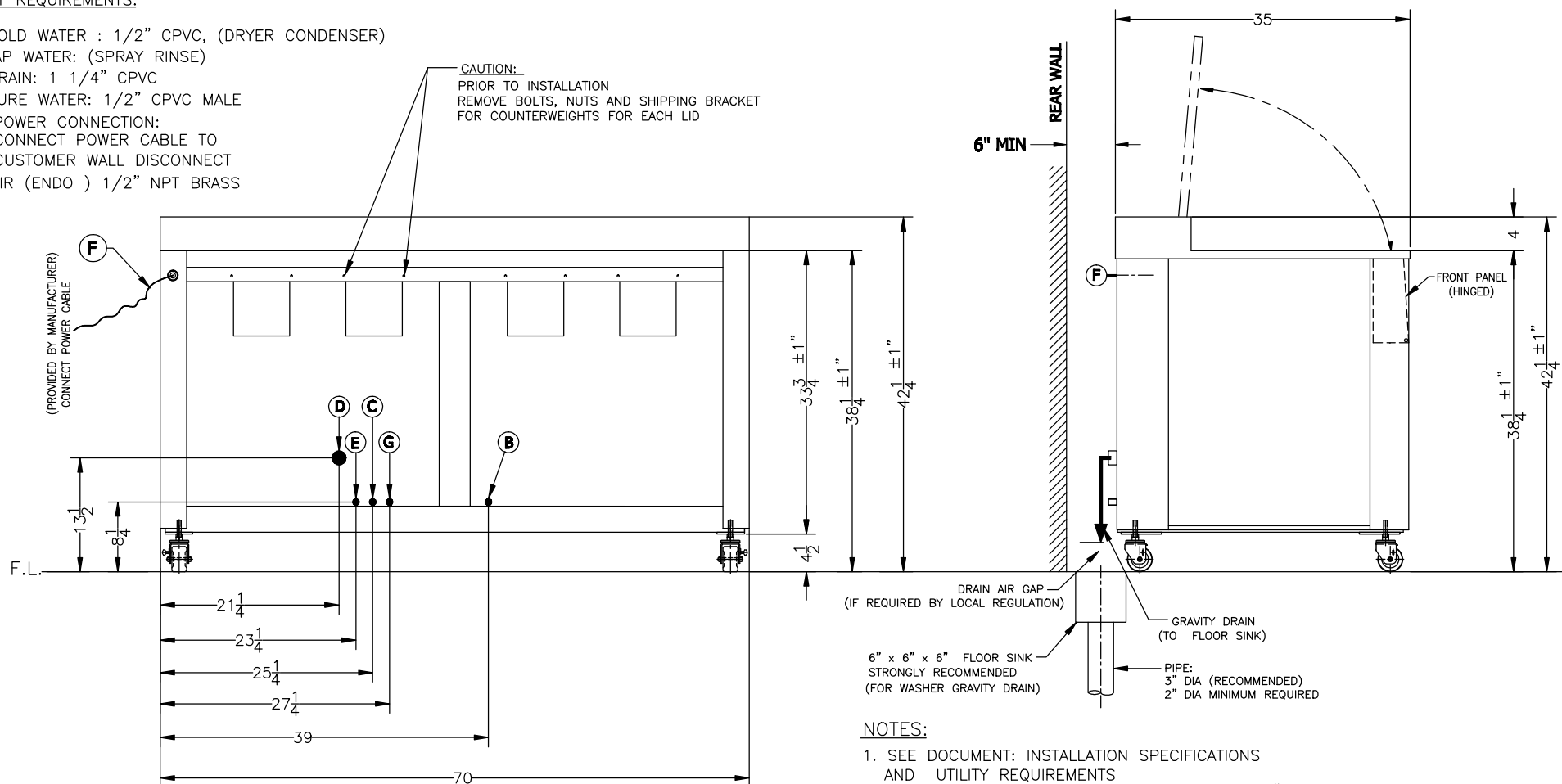
D - DRAIN: 1 1/4" CPVC

E - PURE WATER: 1/2" CPVC MALE

F - POWER CONNECTION:  
CONNECT POWER CABLE TO  
CUSTOMER WALL DISCONNECT

G - AIR (ENDO ) 1/2" NPT BRASS

## CAUTION:

PRIOR TO INSTALLATION  
REMOVE BOLTS, NUTS AND SHIPPING BRACKET  
FOR COUNTERWEIGHTS FOR EACH LID

## NOTES:

1. SEE DOCUMENT: INSTALLATION SPECIFICATIONS AND UTILITY REQUIREMENTS
2. ALL UTILITIES LOCATION DIMENSIONS ARE ± 1"
3. LOCK CASTERS AFTER INSTALLING THE UNIT IN PLACE

**CAUTION !**PRIOR TO INSTALLATION  
REMOVE BOLTS, NUTS AND SHIPPING BRACKETS  
FOR COUNTERWEIGHTS AT UNIT REAR.

SHT. 2 OF 6

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) ALSO REFER TO GENERAL NOTES APPLICABLE TO EQUIPMENT DRAWINGS DWG. NO. 62941-091		CAVIWAVE 20-WRD (R-L) ULTRASONIC CLEANER	EQUIPMENT DRAWING NO. 764335-354
STERIS STERIS Corporation Mentor, OH		GENERAL INSTALLATION LAYOUT DWG.	
		ITEM _____ LOCATION(S) _____	

# Caviwave Console – 20 WRD / DRW

## INSTALLATION SPECIFICATIONS & UTILITY REQUIREMENTS

### Installation Specifications:

1. The installation of the STERIS **Caviwave Console – 20 WRD / DRW** Sonic Washer must meet all Federal, State and Local regulations.
2. Installation specification is listed as Engineering and Installation Guides.  
Referenced components and service connections are not furnished unless under written agreement with STERIS.
3. STERIS assumes no responsibility for changes made necessary through failure to observe the specifications on Equipment Drawing and notes. Specifications and descriptions are subject to change without notice

### Shipping Dimensions and Weight:

1. Shipping Container Dimensions: 76”L x 48”W x 57”H
2. Approximate Washer and Container Shipping Weight: 1265 lbs.
3. Washer Outer Dimensions: 70”L x 35”W x 42 1/4”H

### Environmental Parameters:

1. Approximate Washer Operating Weight - 1260 lbs.  
(Unit weight + 20 gallons water + two 35 lbs loaded instrument trays)
2. Approximate Heat Dissipated from Washer - 2100 Btu
3. Approximate Washer Operational Noise Level - 67 to 75 dB
4. Washer Environment Range
  - Ambient Room Temperature - 50 °F (10 °C) to 105 °F (40 °C)
  - Room Relative Humidity - 30% to 75%
  - Room Atmospheric Pressure - 20.6 "Hg (700 mBar) to 31.3 "Hg (1060 mBar)
5. Service Clearance Considerations
  - Unit is on casters; removable panels are located on all sides  
LOCK ALL CASTERS AFTER INSTALLING THE UNIT IN PLACE
  - Clearance on front side of unit should be depth of unit plus 24 inches to allow unit to be moved out for servicing.
6. THE GAP BETWEEN THE BACK OF THE UNIT AND THE WALL (6” MIN) DEPENDENT IN DEPTH ON THE PIPING AND CONNECTOR SYSTEMS EMPLOYED IN THE UTILITY CONNECTIONS.

# PLUMBING UTILITIES REQUIREMENTS

## COLD WATER:

35 to 38 PSI ( 2.4 to 2.65 BAR ); 40 to 60 °F ( 4 to 16 °C)

Minimum Flow: 8 GPM (30 L/Min)

Connection: 1/2" FPT, S.S.

## **RECOMMENDED COLD WATER FEED:**

	<b>Nominal Conditions</b>	<b>Maximum Conditions</b>
Temperature	40-60°F (4-16°C)	70°F (16°C)
Total Dissolved Hardness as CaCO <sub>3</sub>	50-80 mg/L	120 mg/L
Total Dissolved Solids	100-200 mg/L	500 mg/L
Total Dissolved Alkalinity as CaCO <sub>3</sub>	70-120 mg/L	180 mg/L
pH	6.8 - 7.0	7.5
Total Silica	0.1 – 0.5 mg/L	1.0 mg/

## HOT WATER:

35 to 38 PSI MAX ( 2.4 to 2.65 BAR ); 110 to 120 °F (43 to 49 °C)

Minimum Flow: 6 GPM (23 L/Min)

Connection: 1/2" FPT, S.S.

## **RECOMMENDED HOT WATER FEED:**

	<b>Nominal Conditions</b>	<b>Maximum Conditions</b>
Temperature	110°F (43°C)	120°F (49°C)
Total Dissolved Hardness as CaCO <sub>3</sub>	50-80 mg/L	120 mg/L
Total Dissolved Solids	100-200 mg/L	500 mg/L
Total Dissolved Alkalinity as CaCO <sub>3</sub>	70-120 mg/L	180 mg/L
pH	6.8 - 7.0	7.5
Total Silica	0.1 – 0.5 mg/L	1.0 mg/L

## PURE WATER:

35 to 38 PSI MAX ( 2.4 to 2.65 BAR ); 65 to 120 °F (18 to 49 °C)

Minimum Flow: 6 GPM (23 L/Min)

Connection: 1/2" FPT, S.S.

## **RECOMMENDED PURE WATER FEED:**

	<b>Nominal Conditions</b>	<b>Maximum Conditions</b>
Temperature	65°F (16°C)	120°F (49°C)
pH	7.0	6.8 - 7.5
Resistivity - Ohms/cm	0.5 Meg- Ohm/cm	0.1 Meg- Ohm/cm

## DRAIN:

Drain, (gravity) 10 GPM maximum flows, 1" CPVC Pipe; 120°F (49 °C) max. water temperature

**Note:** See Equipment drawing for Drain plumbing instructions

## COMPRESSED AIR:

30 to 40 PSI, 10 CFM

Connection: 1/2" Male NPT Brass Pipe

## **The quality of compressed air shall be as follows:**

It shall have no detectable liquids: hydrocarbons, water, solvents

It shall have less than 25 ppm gaseous hydrocarbons.

Filtered to 0.03 micron

## Piping Installation Preparation

- Washer hook up piping should be performed by certified plumbing contractor in accordance to local codes.  
RECOMMEND USING FLEXIBLE UTILITY CONNECTIONS - IF ALLOWED BY APPLICABLE CODE.  
(NECESSARY TO ALLOW UNIT TO BE MOVED FOR SERVICING).
- Always blow down facility water and air lines before final connection to washer.
- The washer is not supplied with a vacuum breaker or backflow preventer, and where required by local codes, installation of such a device in the water lines is by others.
- STERIS does not provide piping components from washer to facility water or air utility piping source.
- Facility water and air shut off valves must be nearby and within sight of the washer.
- Shut off valves should be installed and labeled per facility plumbing guidelines.
- Threaded water and air piping disconnects required.  
Unit must be disconnected from facility piping when servicing washer from back side.

# Electrical Utility Requirements:

1. Check the power specified on the unit Nameplate

- **Verify unit voltage configuration prior to installation**
- Check unit Nameplate data tag at time of installation

## **2. Electrical Power Requirements**

- **The standard Cavi 20-WRD (DRW) configuration:**  
**208V / 3PH / 60HZ – 37.1 AMPS**

3. Facility Electrical Disconnect Switch Box

- Facility electrical disconnect box must be nearby and within sight of the washer.
- Box should be installed to allow operator access and labeled with washer identification per facility guidelines.

4. Electrical Circuit Breaker Box Recommendations

- UL listed file E2875 & 154828 or comparable circuit breaker recommended.

- **Circuit breaker should be:**

**208/240V - 60 AMPS rated:**  
(With lockable disconnect switch)

5. Electrical power connection to washer

- **For unit power supply cable connection details: see the wiring schematics.**

**The standard system is designed to accept:**

**208V/3PH / 60HZ – 37.1 AMPS**

208 3 phase requires 5 wires: Neutral, Ground, 3 power wires

**OR PER ORDER:**

**208V/1PH/60HZ – 41.9 AMPS**

208 1 phase requires 4 wires: Neutral, Ground, 2 power wires

**220-240V / 1PH / 60HZ – 38.5 AMPS**

240 1 phase requires 3 wires: Ground, 2 power wires

- Always follow local electrical codes and safety-related work practices for wiring
- Power cable must allow unit to be moved away from the wall for servicing.

## **7. Electrical Installation Preparation**

- Electrical wiring should be performed by certified electrical contractor in accordance to local codes.
- STERIS does not supply Electrical Disconnect Switch Box.