<table>
<thead>
<tr>
<th>ITEM #</th>
<th>QTY</th>
<th>NEW</th>
<th>CONTRACTOR INFORMATION</th>
<th>REMARKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>FE151</td>
<td></td>
<td></td>
<td>VND VND EC CC PC</td>
<td>Vendor to install. E.C. to provide power. C.C. to provide data. P.C. to provide drain and install filter system. See Manuf., Specifications</td>
</tr>
</tbody>
</table>

**Utility Information**

- **Electrical:** See Manuf., Specifications
- **Mechanical: Supply:** See Manuf., Specifications
- **Mechanical: Waste:** See Manuf., Specifications

**Equipment Cell Information**

- **Date created:** 1/16/2013
- **Date revised:** 3/26/18
- **Cell library:** Layout Common Eq.
- **Cell name(s):** CEFE151

**Special CAD Instructions:**

- None specified.
Installation Design Guidelines
For Architects, Engineers, and Contractors
August 3, 2015

These Guidelines have been prepared to help meet the needs of those designing facilities utilizing Coca-Cola Freestyle™ beverage dispensing equipment. For more information, consult with your Coca-Cola Refreshments representative. These guidelines are organized in that utility and support systems are listed first and dispenser area information is last. These Guidelines do not include the requirements of any other systems such as coffee brewers or ice makers.

Water Supply System

- A 1/2” dedicated copper supply line with a separate water shutoff must be located within 6 feet of the water booster and filtration system. The shutoff should end with a ½” pipe fitting, 3/8” O.D. male flare fitting, or a 3/8” compression fitting.
- Use ambient or cold, unsoftened water.
- There must be a minimum of 40 psi at 120 gallons per hour per dispensing system for incoming water pressure. If the water pressure exceeds 120 psi, use a water regulator set at 80 psi.

Water Filtration

- Water filtration systems will be required. Coca-Cola Refreshments will work with the customer for the proper program for water filtration and filter cartridge changing.
- The filter system must meet NSF Standard 42. It must remove off taste and odor, reduce chlorine and chloramines to less than .5 ppm and eliminate visible particles. The filter system must meet the maximum instantaneous demand of the downstream equipment. The dispensing system requires approximately 120 gallons per hour per dispenser when operation. The system should have a filter bypass option.

Backflow Prevention

- Dispensing systems are provided with ASSE 1022 backflow prevention devices. Additional Cross connection backflow prevention assemblies that are required by some municipalities are the responsibility of the outlet. These assemblies must be installed by an authorized trade, not necessarily installers dispatched by Coca-Cola.
Water Boosters

- Water boosters must be installed after the pre-filter (if used) but prior to the chlorine reduction filter. The booster must not be located after the filter system.
- Water booster units should be off the floor, out of any wash-down area, within 6’ of the ½” main water supply, and within 3’ of the electrical outlet. A booster shelf is highly recommended and can be provided by Coca-Cola Refreshments.
- One standard 4.4-gal water booster can support 2 dispensing systems. Higher volume outlets must use 4.4-gallon boosters. A Coca-Cola Refreshments representative will assist with sizing of the water booster and installations of 3 or more dispensers.
- The minimum space requirement for a single booster is 14” high x 18” wide x 19” deep. These dimensions do not include access for service. Dry weight of the booster is 35 pounds. Wet weight is 75 pounds.

Electrical System

- Use a separate 115 volt, 20 amp grounded duplex outlet for each dispenser. Each water booster requires a separate 115 volt 15 amp grounded duplex outlet.
- Locate the outlet within 4 feet of the dispenser and water booster areas.
- These electrical requirements do not include any electrical requirements for ice makers that may be installed on top of the dispenser. Those requirements are dependent on the ice maker that is chosen by the outlet.

Chases

- If a conduit (tube transport or chase) is to be used to house beverage tubing the minimum inside diameter of the conduit should be 6”. This conduit size will support up to 3 dispensers with a maximum run length of 150 feet. For more dispensers or longer run lengths, larger conduit sizes or multiple conduits are recommended - consult your Coke representative for more information.
- Conduits should have sweeping elbows, not 90° elbows. The conduit should end at least 3” above the floor surface to prevent any water entering the conduit.
- Syrup and water must be protected from freezing. Do not run tubing through areas subject to freezing, even if the tubing is insulated.
- Beverage tubing must be insulated if running through areas which are above 95°F. High temperatures are most likely in ceilings or in uninsulated exterior walls. Insulated tubing will require larger than standard conduits.
- Stainless steel beverage tubing must be used where water (condensation) can accumulate. This generally means all underfloor chases.
- Use only barrier plastic beverage tubing approved by Coca-Cola Fountain or stainless steel beverage tubing.
CO2 System

- There are 2 types of CO2 system – bottle tanks and bulk supply.
- Typical bulk CO2 tanks are 16 to 24 inches in diameter and require connection to fill and vent access on an outside wall.
- Typical CO2 tanks are 7 to 10 inches in diameter. A minimum of two tanks are required if not using bulk CO2.
- On bulk CO2 tanks ensure vaporizing and regulator capacity is sufficient (3 scfm per dispenser). Watch average versus instantaneous requirements. Bulk CO2 suppliers are good resources for designing bulk systems.
- If tank CO2 is to be located under the counter, 30” undercounter clearance is required.
- CO2 tanks must be located next to a solid surface and chained in the upright position.
- CO2 storage areas must be open and well ventilated.
- One regulator set per dispenser system is required. The regulator set should come with the beverage system and may be mounted on the BIB rack or wall.

Sweetener System

- The sweeteners will be provided in BIB form.
- The ideal storage temperature for sweetener is between 60°F and 75°F. Sweetener cannot be stored in rooms exceeding 95°F or below 55°F.
- The minimum footprint for a BIB product platform rack is 18” deep x either 16” or 30” wide (including clearance). The size of the rack is dependent on the volume of the outlet. Attached are drawings of two of the rack options. A Coca-Cola representative will assist with sizing of the rack. Some installations use a BIB rack that have pumps, selectors, and a CO2 regulator set assembly mounted directly to the rack. (See details in Installation Manuals available from Coca-Cola Fountain).

Ice Makers

- Size ice making equipment properly. Usage for soft-drinks may vary from 0.8 pounds per cup to 1.4 pounds per cup, depending on equipment selected and cup set.
- Hard cube ice is required for all dispenser units.
- Do not use super-cooled ice (ice from freezer). Super-cooled ice causes drinks to foam and may damage a cold-plate system. Use ice as produced from the ice maker and stored in an insulated bin.
Drains

- An approved 3" or larger floor drain must be located within 3 feet of the soft drink dispenser. The preferred drain is an open floor sink with a center cone located centered behind the rear of the dispenser. Do not use copper for soft-drink drains.
- Drains requirements for Post-Mix equipment will vary locally. Be aware that there often can be no direct connection between the sewage system and any drains originating from equipment in which food or utensils are placed. Food includes ice. In some jurisdictions, an acceptable manner to install a drain from an ice bin is to have the drain have a standard vertical air gap (2 times the diameter of drain pipe) between it and the floor drain.

Network Access

It is mandatory that all Coca-Cola Freestyle™ dispensers be connected to a Verizon cellular network for software and recipe updates and data downloads. There are two options for connectivity with cellular signal connection as the preferred choice.

- Wireless cellular connection: the signal strength of the Coca-Cola provided Verizon cellular modem is desired to be -80dBm.
- Wired: an Ethernet cable terminated into a RJ45 jack must be located between 3 to 6 feet of the dispenser.
Dispensing Area

- The design of the dispensing area should avoid adding heat from any external source. There should be adequate insulation from heat lamps, ovens, broilers, compressor exhausts, and the like. Follow counter space recommendations. If the equipment is to be built in to a confined space add additional ventilation.
- Dimensions and Clearance (drawings attached)

<table>
<thead>
<tr>
<th>Type of Dispenser</th>
<th>Maximum Width</th>
<th>Maximum Depth</th>
<th>Depth at Base</th>
<th>Height</th>
<th>Side Clearance</th>
<th>Rear Clearance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-Serve Dispenser</td>
<td>25.28”</td>
<td>35.85” (front bias)</td>
<td>30”</td>
<td>72” w/o lid, 73.75” with lid</td>
<td>2.5” when placed near wall</td>
<td>3”</td>
</tr>
<tr>
<td>Crew Serve Dispenser – Single Nozzle</td>
<td>25”</td>
<td>33”</td>
<td>30”</td>
<td>72”</td>
<td>2.5” on right side</td>
<td>3”</td>
</tr>
</tbody>
</table>

- The floor must be able to support 1000 pounds which includes the dispenser and the water or ice in the dispenser. There will be 4 load bearing legs to distribute the weight of the dispenser to the floor. The floor is to be flat with less than ½” maximum slope over the area of the dispenser.
- In front of the dispenser, allow clearance for approach and any queuing needs. Insure adequate clearance for wheelchair approach.
- There should be counter space or tray rail adjacent to the dispenser for consumers to rest a food tray if desired. This recommendation is less important for outlets where the cup is served in advance of the food.
- For counters and tray rails next to the dispenser: This counter should either have clearance between the counter and the dispenser (per chart, above) or the countertop not be more than 30” deep (measured from rear of dispenser) and the cabinet not be more than 29” deep.
- Allow space above the dispenser for loading ice and adequate clearance if an icemaker is installed on top.
Self-Serve:

Maximum Depth = 35”

Maximum Width = 25 ¼”

Height = 72”

Depth at Base = 30”

Copyright The Coca-Cola Company, 2015
Resources Available
Coca-Cola Fountain can be a valuable resource to help you design and access the many suppliers of equipment for your post-mix system. We continually test and improve equipment to assure Continuous Improvement in Beverage Quality, System Reliability, and Total System Cost.

Send requests for information to: The Coca-Cola Company
P.O. Drawer 1734
Atlanta, GA 30301

This manual is furnished on the condition that the user assumes all risks and liabilities arising out of the use, non-use, misuse or reliance on this manual. The Coca-Cola Company does not warrant suitability, favorable results, or compliance with all applicable laws, rules and regulations. The Coca-Cola Company does not warrant that use of this manual will be free from infringement of any industrial property right of any third party. Further, The Coca-Cola Company does not endorse or guarantee the equipment installed hereunder and shall not be liable or responsible for any loss, claims, or damage, direct or consequential, arising out of the use, non-use, or reliance on this manual.

©2015 The Coca-Cola Company. This manual is not to be duplicated or released, in whole or in part, without the express written permission of The Coca-Cola Company, which reserves the right to make changes hereto without notice to recipients of this manual.