

This final document represents the definitive view of the agency on the questions addressed and may be relied upon by the regulated industry and members of the public.

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**Guidance Type:** Test Procedures

**Category:** Residential Products

**Product:** Clothes washers

**Product Sub-type:** all

**Guidance Version:** FINAL

**Issued:** July 6, 2010

**Q: For purposes of measuring the clothes container capacity under 10 CFR 430, Subpart B, Appendix J1 test procedure, what is considered the clothes container?**

**A: The following answer** is intended to clarify the Department's views on measuring the clothes container capacity under 10 CFR 430, Subpart B, Appendix J1 test procedure. This interpretative rule represents the Department's interpretation of its existing regulations and is exempt from the notice and comment requirements of the Administrative Procedure Act. *See 5 U.S.C. §553(b)(A)*. Nevertheless, the Department sought comment on a draft issued May 13, 2010, and considered all comments received in the development of the answer provided below.

The general requirements for measuring the clothes container capacity of a clothes washer are found in 10 CFR Part 430, Subpart B, Appendix J1. The following statement provides manufacturers with additional guidance on this issue.

Clothes container means the compartment within the clothes washer that holds the clothes during the operation of the machine.

**For top-loading (vertical-axis) clothes washers:**

For top-loading (vertical-axis) clothes washers, the upper-most edge of the clothes container shall be considered the highest point of the inner-most diameter of the tub cover. The maximum fill level that is consistent with the test procedure corresponds to "Fill Level 3" in Figure 1. Figure 2 shows the location of "Fill Level 3" for a variety of potential tub cover designs. (DOE notes that the diagrams in Figure 2 were originally submitted by commenters; on consideration of the diagrams, DOE made modifications to the interpretation of "Fill Level 3" in examples 1, 2, 4 and 6.)

"Fill Level 3" represents the highest horizontal plane that a clothes load could occupy. "Fill Level 4" is not consistent with the capacity measurement method of the test procedure because, as defined in Section 3.1 of the test procedure, "Fill Level 4" includes volume above the surface of the tub cover that a dry clothes load could not occupy during washer operation.

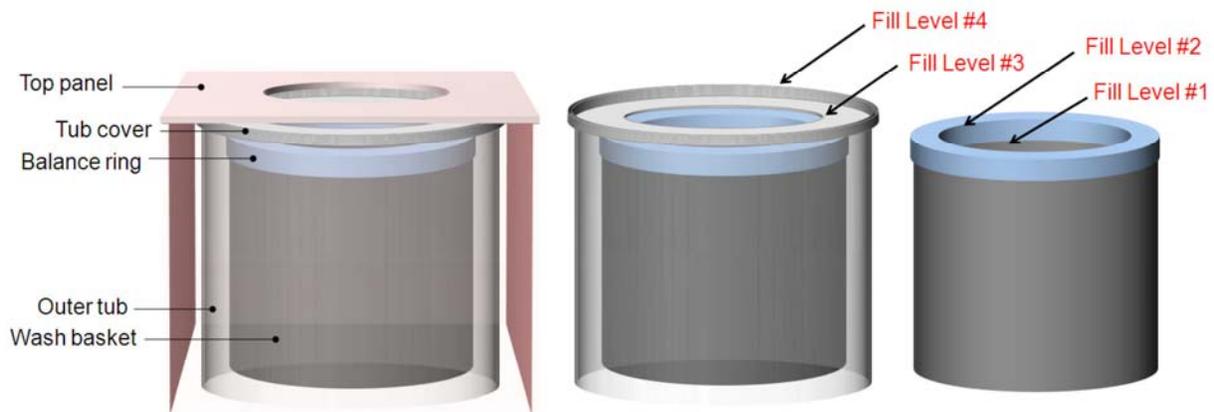
For the volume measurement of the machine capacity for top loading (vertical-axis) machines, the filling of the water must stop at the highest horizontal plane that a clothes load could occupy (not to exceed

“Fill Level 3”). The volume is measured with the door or lid open. If any portion of the door, when closed, would occupy the measured volume space, the volume that the door portion would occupy must be excluded from the measurement.

**For front-loading (horizontal-axis) clothes washers:**

During the capacity measurement for front-loading (horizontal-axis) clothes washers, the shipping bolts are to remain in place. This will prevent the clothes container from sagging downward when filled with water and stretching the bellows structure, as well as prevent possible damage to the clothes container structure.

For the volume measurement of the machine capacity for front-loading (horizontal-axis) machines, the filling of the water must not exceed the highest point of contact between the door and the door gasket. If any portion of the door or gasket would occupy the measured volume space when the door is closed, the volume that the door or gasket portion would occupy must be excluded from the measurement. “Fill Volume B” in Figure 3 below represents the maximum fill volume for frontloading (horizontalaxis) clothes washers. Figure 4 shows “Fill Volume B” for a front-loading washer with a concave door, and Figure 5 shows “Fill Volume B” for a top-loading horizontal-axis clothes washer.



**Figure 1: Representation of Fill Levels for the Clothes Container Capacity Measurement for Vertical-Axis Clothes Washers**

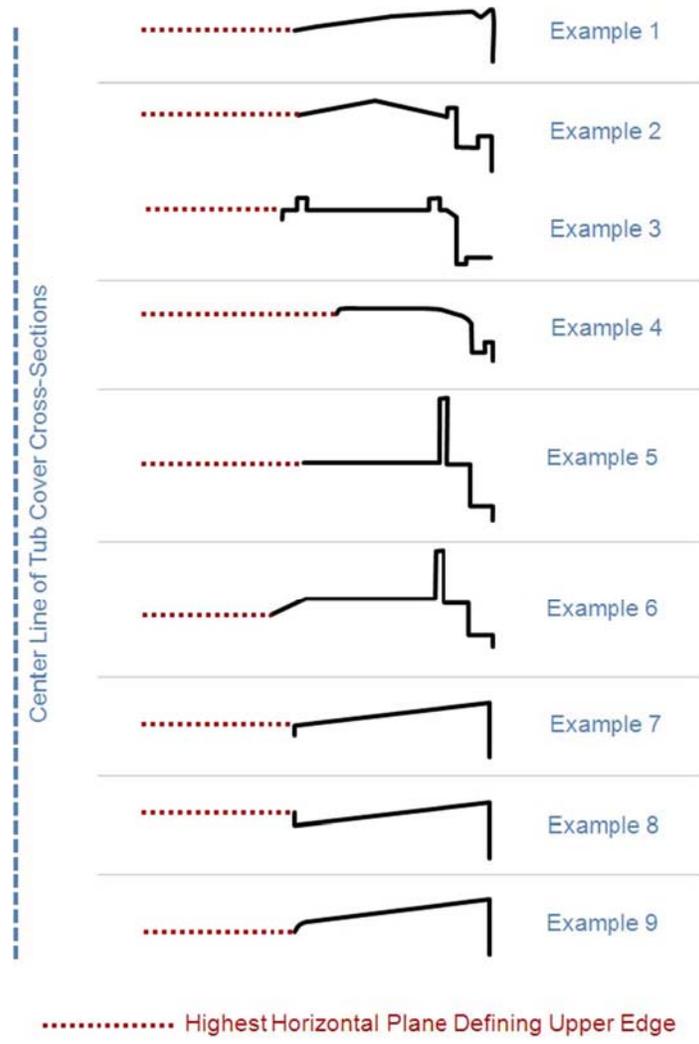


Figure 2: Example Cross-Sections of Tub Covers Showing the Highest Horizontal Plane Defining the Uppermost Edge of the Clothes Container.

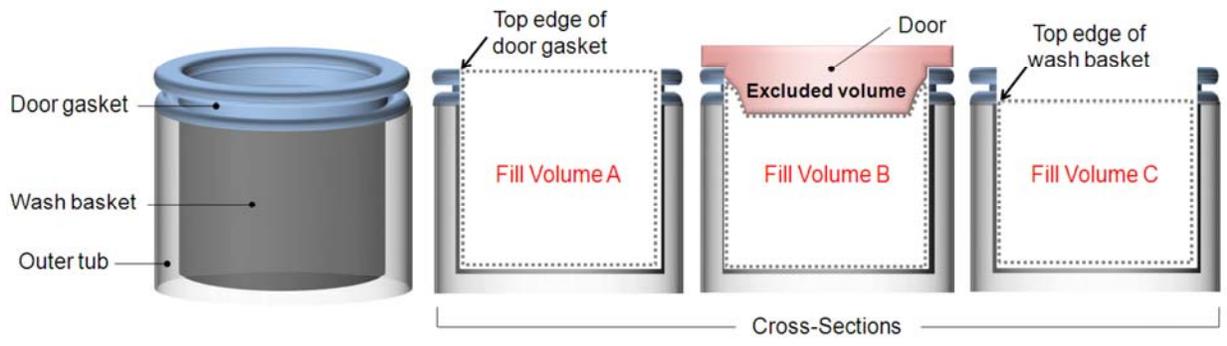


Figure 3: Representation of Fill Volumes for the Clothes Container Capacity Measurement for Front-Loading Horizontal-Axis Clothes Washers

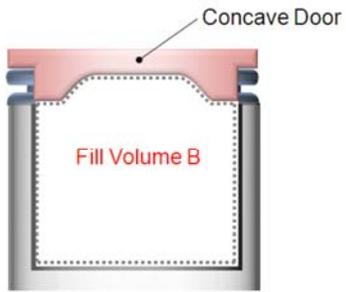


Figure 4: Representation of Correct Fill Volume for Front-Loading Washer with Concave Door

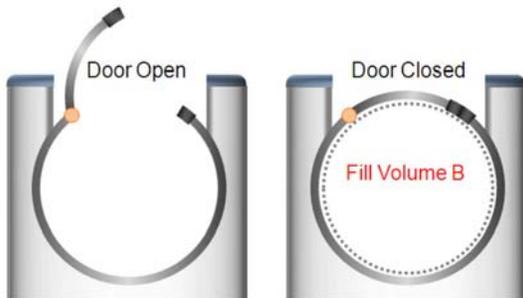


Figure 5: Representation of Correct Fill Volume for Top-Loading Horizontal-Axis Clothes Washers