

Standard Information

Standard Number: UL 1678

Standard Name: Household, Commercial, and Institutional-Use Carts, Stands and Entertainment Centers for Use with Audio and/or Video Equipment,

Standard Edition and Issue Date: 5th Edition Dated August 10, 2012

Date of Revision: March 24, 2017

Date of Previous Revision of Standard: 5th Edition Revised July 27, 2016

Effective Date of New/Revised Requirements

Effective Date: **December 31, 2018**

Impact, Overview, and Action Required

Impact Statement: A review of all Listing Reports is necessary to determine which products comply with new/revised requirements and which products will require re-evaluation. **NOTE:** Effective immediately, this revised standard will be exclusively used for evaluation of new products unless the Applicant requests in writing that current requirements be used along with their understanding that their listings will be withdrawn on Effective Date noted above, unless the product is found to comply with new/revised requirements.

Overview of Changes: Revisions to address potential injury from different loading and unloading scenarios, Addition of requirements regarding the securement of an audio or video device to the cart, stand or entertainment center, Revision to address polymeric components whose failure would cause the supported weight of the audio or video product to be released and Addition of requirements for testing wide handles with the load distributed between two 3-inch areas on the single handle. Specific details of new/revised requirements are found in table below.

If the applicable requirements noted in the table are not described in your report(s), these requirements will need to be confirmed as met and added to your report(s) such as markings, instructions, test results, etc. (as required).

Client Action Required:

Information – To assist our Engineer with review of your Listing Reports, please submit technical information in response to the new/revised paragraphs noted in the attached or explain why these new/revised requirements do not apply to your product (s).

Current Listings Not Active? – *Please immediately identify any current Listing Reports or products that are no longer active and should be removed from our records. We will do this at no charge as long as Intertek is notified in writing prior to the review of your reports.*

Description of New/Revised Technical Requirements

Clause	Verdict	Comment
		<i>Additions to existing requirements are <u>underlined</u> and deletions are shown lined-out below.</i>
<u>6.2</u>		<u>A mounting system used with a cart, stand or entertainment center that is intended to support a video display with a weight greater than 15 lbs (6.8 Kg) shall be constructed to prevent the video display from being inadvertently dislodged or removed from the mounting system. Gravity shall not be the sole means of securement for the video display.</u>
9.2.2		Acceptable means for securement in accordance with 9.2.1 include screws, straps and similar securement means. <u>The assembly of the equipment to the supporting surface shall comply with the Use and Care Instructions, Section 25.</u>
<u>9.3</u>	Info	<u>Multiple video display surfaces</u>
<u>9.3.1</u>		<u>A cart, stand or entertainment center provided with two or more mounting surfaces for video displays shall be provided with use and care instructions specifying the order in which the video displays is to be installed; unless installation in any order does not cause the product to become unstable. The product shall be tested for stability in accordance with 16.7.1.</u>
<u>9.3.2</u>		<u>A cart, stand, or entertainment center provided with two or more mounting surfaces for video displays shall specify both the maximum and minimum weight of the equipment or maximum weight and allowable percent difference to be supported if equipment that is less than the maximum weight when mounted will cause the product to become unstable. The product shall be tested for stability in accordance with 16.7.2.</u>
<u>9.3.3</u>		<u>A cart, stand, or entertainment center provided with two or more mounting surfaces where removal of one or more pieces of video displays could cause the product to become unstable shall be permanently marked as specified in 24.11.</u>
11A	Info	Materials
11A.1	Info	Flammability

Clause	Verdict	Comment
11A.1.1		<p>Polymeric or similar material used in the construction of a cart, stand, or entertainment center shall have a minimum flammability classification of HB. The flammability classification is to be determined by tests described in the Standard for Tests for Flammability of Plastic Materials for Parts in Devices and Appliances, UL 94. A material classified using 1/8-inch (3.2-mm) thick bar specimens is able to be employed in thicknesses less than 1/8 inch in the cart, stand or entertainment center.</p> <p><i>Exception: The following materials are exempt from the requirements of 11A.1.</i></p> <p>a) <i>Wheels, casters, and caster inserts.</i></p> <p>b) <i>External accessories that are not permanently attached to the cart, stand or entertainment center, such as a screwdriver, container of lubricating oil, and similar accessories.</i></p> <p>c) <i>Small parts that satisfy all of the following:</i></p> <p>1) <i>The maximum volume does not exceed 0.122 inch³(2 cm³); and</i></p> <p>2) <i>The maximum dimension does not exceed 1.18 inches (3 cm).</i></p> <p>d) <i>Polymeric material 0.010 inch (0.254 mm) thick or less.</i></p>
<u>11A.2</u>	Info	Polymeric load supporting parts
<u>11A.2.1</u>		<u>A polymeric part of the cart, stand or entertainment center shall not be used as the only attachment method for securing the weight of the video displays equipment to the cart stand or entertainment center.</u>
<u>11A.2.2</u>		<p><u>A polymeric part may be used as a bushing, bearing, spacer, or other part provided that when removed from the product the product will not release the weight of the video displays equipment as specified in Loading Tests, Section 17. The part does not need to be removed for the tests specified in Section 17 if by inspection it can be determined that the polymeric part is not required to support the weight load of the video displays equipment.</u></p> <p><i>Exception: Wheels and casters that comply with Tip Stability, Section 16, Loading Tests, Section 17, and Wheel, Roller, or Caster Securement Test, Section 21, are acceptable.</i></p>
15	Info	Temperature Stability Test
15.2		An unloaded cart, stand or entertainment center is to be placed in a full-draft circulating-air oven. The air temperature within the oven is to be maintained at 70°C (158°F) for 7 hours.
16.6	Info	Appurtenance stability test
16.6.1		A cart, stand or entertainment center intended for use with audio and/or video equipment or a television, shall not tip over when a door, drawer, shelf or other appurtenance located within 30 inches (76.20 cm) of the floor is manipulated and loaded by applying a 50-pound (22.68-kg) weight to the top edge of the door at a point 3 inches (7.62 cm) in from the top edge. See Figure 16.6.
<u>16.6.2</u>		<u>The cart, stand or entertainment center shall be placed on a level surface } 0.2 degrees. The support surfaces shall be loaded as specified in Table 14.1.</u>
16.7	Info	Multiple audio and video support surface test

Clause	Verdict	Comment
16.7.1		In accordance with 9.3.1, the cart, stand or entertainment center is to be placed on a level surface +/-0.2 degrees and the product is to be loaded as specified in the use and care instructions. When the use and care instructions do not specify a specific order of loading the support surfaces the support surfaces may be loaded with the maximum rated weight load for that surface in any order; one at a time. The product shall not overturn as each supporting surface is loaded in any order or as specified in the use and care instructions.
16.7.2		In accordance with 9.3.2, the test specified in 16.7.1 shall be repeated using the minimum and maximum load rating of each supporting surface to create the least stable condition when a minimum load is specified.
16.7.3		When loading is completed as specified in the use and care instructions, the specified configurations shall be subjected to the stability tests of Section 16, Tip Stability. The tests may need to be repeated in the least stable configurations when different load configurations are specified in the use and care instructions.
18	Info	Handle Strength Test
18.3		The load is to be uniformly applied without clamping over a 3-inch (7.6-cm) width at the center of the handle. The load is to be started at zero and gradually increased so that the total testing value is attained within 5 – 10 seconds and then maintained for a period of one minute. <u>If more than one handle is furnished on the product, the force is to be distributed between the handles.</u> A product with a handle that extends across the side of the cart shall have the force distributed between two points centered on the outside 1/4 width point of the handle. See Figure 18.1. The distribution of forces is to be determined by measuring the percentage of the product weight sustained by each handle, with the product in the intended position for movement. If a product is furnished with more than one handle and can be moved by only one handle, each handle shall be capable of sustaining the total test load. <u>The test load is to be applied in both the horizontal and vertical directions.</u>
24		MARKINGS General
<u>24.11</u>		<u>In accordance with 9.3.3 a cart, stand, or entertainment center with more than one mounting surface that may become unstable shall be permanently marked within sight of the securement points of the audio or video equipment but not covered by the equipment with the following: “WARNING – Death or Serious injury may occur when removing mounted products. Refer to the use and care instructions before removing mounted equipment” or an equivalent statement.</u>
25	Info	Use and Care Instructions

Clause	Verdict	Comment
25.11		<p>The instructions shall include particular details concerning:</p> <p>c) <u>A product that has support surfaces for multiple audio and video devices shall specify the order of loading the cart, stand or entertainment center when the products stability may be compromised by loading the support surfaces in a non-specific order. See 9.3. Any specific instruction regarding the need for user assistance in the assembly and loading of the product shall be specified in the use and care instructions.</u></p> <p>d) <u>Limits to the proper position related to fixed structures when required to comply with the Force Stability Test. See 16.5. The following statement shall be included in the instructions: "WARNING – Risk of death or serious injury. This surface must be placed against a fixed in place wall at least as tall as the television", or an equivalent statement.</u></p>
<u>25.15.1</u>		<p><u>A product that has support surfaces for multiple audio and video devices that may become unstable when loaded surfaces are unloaded shall specify the order of removing the audio or video products to reduce the tendency of the product to become unstable. Any specific instruction regarding the need for user assistance in the disassembly and unloading of the product shall be specified in the use and care instructions.</u></p>
		<p>CUSTOMERS PLEASE NOTE: This Table and column "Verdict" can be used in determining how your current or future production is or will be in compliance with new/revised requirements.</p>