

## STANDARD INFORMATION

**Standard:** CSA C22.2 No. 60335-2-31

**Standard ID:** Household and Similar Electrical Appliances — Safety — Part 2-31: Particular Requirements for Range Hoods and Other Cooking Fume Extractors [CSA C22.2#60335-2-31:2019 Ed.4]

**Previous Standard ID:** Household and Similar Electrical Appliances — Safety — Part 2-31: Particular Requirements for Range Hoods and Other Cooking Fume Extractors [CSA E60335-2-31:2012 Ed.3]

## EFFECTIVE DATE OF NEW/REVISED REQUIREMENTS

**Effective Date:** **May 1, 2024**

## IMPACT, OVERVIEW, AND ACTION REQUIRED

**Impact Statement:** Per our accreditation, Intertek is required to review reports against the standard revisions to confirm compliance. Once compliance is confirmed, the standard reference in the report is updated to show continued compliance to the technical requirements of the standard. Reports not updated to this version by the effective date above will be withdrawn.

NOTE: Standard number has changed from CSA E60335-2-31 to CSA C22.2 No. 60335-2-31. CSA C22.2 No. 60335-2-31 is to be used in conjunction with CSA C22.2 No. 60335-1:16.

### Overview of Changes:

- added requirements to address range hood installation
- added construction requirement to address risk of entrapment in rangehoods or down-draft system

Specific details of new/revise requirements are found in table below.

***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 – Please immediately identify any current Listing Reports or products that are no longer active and should be removed from our records.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.***



## STANDARD INFORMATION

| CLAUSE      | VERDICT | COMMENT  |
|-------------|---------|--|
|             |         | <i>Additions to existing requirements are <u>underlined</u> and deletions are shown <del>lined-out</del> below.</i>  |
| 7           | Info    | <b>Marking and instructions</b><br><br>Appliances shall be marked on or near the lampholder with the maximum power input of replaceable lamps as follows:<br><br>lamp max .... W<br><br>The word “lamp” may be replaced by symbol IEC 60417-5012 (2002-10).<br><br><u>If the voltage rating of the lamp is less than the rated voltage of the appliance, the voltage rating of the lamp shall also be marked on or near the lampholder.</u>  |
| 7.1         |         | <u>Range hoods intended to be used with self-shielded tungsten halogen lamps or metal halide lamps only shall be marked with symbol “Use only with self-shielded tungsten halogen lamps or self-shielded metal halide lamps” or with the substance of the following:</u><br><br><u>Use only with self-shielded tungsten halogen lamps or self-shielded metal halide lamps</u><br><br><u>Range hoods incorporating a protective shield shall be marked with symbol “Replace any cracked shield” or with the substance of the following:</u><br><br><u>Replace any cracked protective shield</u> |
| 7.1B - 7.1G |         | <b><i>New clauses added;</i></b><br><br>These clauses contain requirements for range hoods (see standard for details).   |
|             |         | <b><i>New clause added;</i></b>  |
| 7.6         |         | Use only with self-shielded tungsten halogen lamps or self-shielded metal halide lamps<br><br>Replace any cracked shield   |



| CLAUSE | VERDICT | COMMENT  |
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|        |         | <p>The instructions shall state the substance of the following:</p> <ul style="list-style-type: none"><li>– there shall be adequate ventilation of the room when the range hood is used at the same time as appliances burning gas or other fuels (not applicable to appliances that only discharge the air back into the room);</li><li>– the details concerning the method and frequency of cleaning;</li><li>– there is a fire risk if cleaning is not carried out in accordance with the instructions;</li><li>– do not flambé under the range hood;</li><li>– CAUTION: Accessible parts may become hot when used with cooking appliances.</li></ul>   |
| 7.12   |         | <p><u>The instructions shall state the substance of the following:</u></p> <ul style="list-style-type: none"><li>– <u>lamp type, shape description and image;</u></li><li>– <u>rated wattage of the intended lamp;</u></li><li>– <u>max wattage of a potential replacement lamp;</u></li><li>– <u>rated voltage or voltage range of lamp or, for pre-heat starting fluorescent lamps starter replacement details;</u></li><li>– <u>the type of lamp cap;</u></li><li>– <u>nominal dimension(s) of lamp.</u></li></ul> <p><u>An ILCOS D code (standard version code specified in IEC 61231) including both the letter and figure sections is considered to provide the required instructions.</u></p>   |
| 7.12.1 |         | <p>The installation instructions shall include the substance of the following:</p> <ul style="list-style-type: none"><li>– the air must not be discharged into a flue that is used for exhausting fumes from appliances burning gas or other fuels (not applicable to appliances that only discharge the air back into the room);</li><li>– the minimum distance between the supporting surface for the cooking vessels on the hob and the lowest part of the range hood. (When the range hood is located above a gas appliance, this distance shall be at least 65 cm. If the instructions for installation for the gas hob specify a greater distance, this has to be taken into account. The distance of 65 cm can be reduced for<ul style="list-style-type: none"><li>• non-combustible parts of range hoods, and or</li><li>• parts operating at safety extra low voltage, provided these parts do not give access to live parts if deformed);</li></ul></li><li>– regulations concerning the discharge of air have to be fulfilled.</li></ul> <p><u>If the range hood is only intended to be installed over a hob with no more than four hob elements this shall be stated.</u></p> <p><u>The installation instructions for range hoods with accessible metallic enclosures of class II construction shall include details that indicate the location and maximum permitted lengths for any fixing or mounting screw or other fixing device that</u></p> |



| CLAUSE               | VERDICT | COMMENT  |
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|                      |         | <p><u>penetrates into the range hood to attach an accessory such as a fascia or duct fitting.</u></p> <p><u>Where fixing or mounting screws, or other fixing devices are used, that penetrate into the range hood with an accessible metallic enclosure of class II construction, to attach an accessory, the instructions shall indicate the required location of these screws or fixing devices and include the substance of the following warning.</u></p> <p><u>Warning: Failure to install the screws or fixing device in accordance with these instructions may result in electrical hazards</u></p> <p><u>The warning shall be in the same part of the instructions that include details of how to mount the equipment.</u></p> <p><u>The installation instructions for down-draft systems shall also include the substance of the following:</u></p> <p><u>– the following warning (for down-draft systems not intended to be used with gas hobs):</u></p> <p style="padding-left: 40px;"><u>CAUTION: This appliance is not intended to be used with gas hobs.</u></p> <p><u>– details of the gas appliance (for down-draft systems intended to be used together with gas hobs).</u></p> |
| 7.12.1A -<br>7.12.1G |         | <p><b><i>New clauses added;</i></b></p> <p>These clauses contain requirements for installation of range hoods (see standard for details).</p>  |
| 7.14                 |         | <p><b><i>New clause added;</i></b></p> <p>The height of symbol “Use only with self-shielded tungsten halogen lamps or self-shielded metal halide lamps” or symbol “Replace any cracked shield” shall be at least 15 mm.</p>  |
| 7.15                 |         | <p>The marking for maximum power input of a replaceable lamp shall be visible during replacement of the lamp.</p> <p><u>Symbol “Use only with self-shielded tungsten halogen lamps or self-shielded metal halide lamps” or the marking “Use only with self-shielded tungsten halogen lamps or self-shielded metal halide lamps” shall be visible during replacement of the lamp.</u></p> <p><u>Symbol “Replace any cracked shield” or the marking “Replace any cracked shield” shall be visible when the appliance is installed as in normal use.</u></p>  |



| CLAUSE  | VERDICT | COMMENT  |
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| 11      | Info    | <b>Heating</b><br><br>The temperature rise limit for external enclosures and wood does not apply when the hob elements are in operation. When the appliance is tested without the hob elements in operation, only the temperature rises of the external enclosure and wood are measured, the temperature rise limit for wood being 65 K.   |
| 11.8    |         | Temperature rises of lampholders <u>and the enclosure</u> are also determined with the fan motor switched off <u>and lights switched on</u> . <u>Enclosure temperatures are not measured within a distance of 35 mm around the lamp glass regardless of its shape</u> .<br><br>For down-draft systems, the temperature rises shall not exceed the values given in Table 3 reduced by 15 K.             |
| 19      | Info    | <b>Abnormal operation</b><br><br><i><b>New section added;</b></i>  |
| 19.101A |         | <b>Test method A</b><br><br>This section contains requirements for abnormal operation (see standard for details).<br><br><i><b>New section added;</b></i>  |
| 19.101B |         | <b>Test method B</b><br><br>This section contains requirements for abnormal operation (see standard for details).  |
| 20      | Info    | <b>Stability and mechanical hazards</b><br><br><i><b>New clause added;</b></i><br><br>If a part of a range hood or down-draft system can be moved automatically, there shall be no risk of entrapment or injury.<br><br>Compliance is checked by the following test.   |
| 20.101  |         | The appliance is operated at rated voltage and is operated to open and close the driven part.<br><br>The driven part shall<br><br>a) decelerate to a speed lower than 15 mm/s in the last 50 mm of the movement, as it approaches any position in which entrapment may occur; or<br>b) when IEC 61032 probe 32 is placed at any potential entrapment point across the width and height of the opening; |



| CLAUSE           | VERDICT | COMMENT   |
|------------------|---------|---|
|                  |         | <ul style="list-style-type: none"><li>– stop and reverse direction before contacting the probe; or</li><li>– if the probe is touched by the driven part;<ul style="list-style-type: none"><li>• not exert a force on the probe exceeding a value of 100 N; or</li><li>• not subject the probe to a shear force.</li></ul></li></ul> <p>If compliance relies on the operation of an electronic circuit, the test is repeated under the following conditions applied separately:</p> <ul style="list-style-type: none"><li>– the fault conditions in a) to g) of 19.11.2, are applied one at a time to the electronic circuit;</li><li>– the electromagnetic phenomena tests of 19.11.4.2 and 19.11.4.5 are applied in turn to the appliance.</li></ul> <p>The driven part shall</p> <ul style="list-style-type: none"><li>a) decelerate to a speed lower than 15 mm/s in the last 50 mm of the movement, as it approaches any position in which entrapment may occur; or</li><li>b) when IEC 61032 probe 32 is placed at any potential entrapment point across the width and height of the opening;<ul style="list-style-type: none"><li>– stop and reverse direction before contacting the probe; or</li><li>– if the probe is touched by the driven part;<ul style="list-style-type: none"><li>• not exert a force on the probe exceeding a value of 100 N; or</li><li>• not subject the probe to a shear force.</li></ul></li></ul></li></ul> |
|                  |         | <b><i>New section added;</i></b>  |
| 22               |         | <b>Construction</b><br><br>This section contains requirements for construction (see standard for details).  |
|                  |         | <b><i>New section added;</i></b>  |
| 23               |         | <b>Internal wiring</b><br><br>This section contains requirements for internal wiring (see standard for details).  |
|                  |         | <b><i>New section added;</i></b>  |
| 24               |         | <b>Components</b><br><br>This section contains requirements for components (see standard for details).  |
| 25               | Info    | <b>Supply connection and external flexible cords</b>  |
|                  |         | <b><i>New clauses added;</i></b>  |
| 25.3B -<br>25.3H |         | These clauses contain requirements for range hoods (see standard for details).  |