UL 60335-2-3

STANDARD FOR SAFETY

Household and Similar Electrical Appliances, Part 2: Particular Requirements for Electric Irons

UL Standard for Safety for Household and Similar Electrical Appliances, Part 2: Particular Requirements for Electric Irons, UL 60335-2-3

Fifth Edition, Dated July 14, 2004

Summary of Topics

This revision to ANSI/UL 60335-2-3, dated May 10, 2022, includes editorial revisions to National Deviations; 1DV.1, 1DV.2, 8.1.1DV, 11.8DV.3 and 20.2DV

UL 60335-2-3 is an adoption of IEC 60335-2-3, Safety Standard for Household and Similar Electrical Appliances, Part 2: Particular Requirements for Electric Irons, (Edition 5.2, Issued by the IEC July 2008). Please note that the national difference document incorporates all of the U.S. national differences for UL 60335-2-3.

Text that has been changed in any manner or impacted by UL's electronic publishing system is marked with a vertical line in the margin.

The revised requirements are substantially in accordance with Proposal(s) on this subject dated February 25, 2022.

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Standard for Safety of Household and Similar Electrical Appliances, Part 2:

Particular Requirements for Electric Irons

Fifth Edition

July 14, 2004

This ANSI/UL Standard for Safety consists of the Fifth Edition including revisions through May 10, 2022.

The most recent designation of ANSI/UL 60335-2-3 as an American National Standard (ANSI) occurred on May 10, 2022. ANSI approval for a standard does not include the Cover Page, Transmittal Pages, Title Page, or Preface. The National Difference Page and IEC Foreword are also excluded from the ANSI approval of IEC-based standards.

Comments or proposals for revisions on any part of the Standard may be submitted to UL at any time. Proposals should be submitted via a Proposal Request in UL's On-Line Collaborative Standards Development System (CSDS) at https://csds.ul.com.

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Preface (UL)

This UL Standard is based on IEC Publication 60335-2-3: edition 5 Standard for Household and Similar Electrical Appliances, Part 2: Particular Requirements for Electric Irons, as revised by Amendments 1 and 2 and corrigendum 1. IEC publication 60335-2-3 is copyrighted by the IEC.

Efforts have been made to synchronize the UL edition number with that of the corresponding IEC standard with which this standard is harmonized. As a result, one or more UL edition numbers have been skipped to match that of the IEC edition number.

This UL Standard UL 60335-2-3 Standard for Household and Similar Electrical Appliances, Part 2: Particular Requirements for Electric Irons, is to be used in conjunction with the fifth edition of UL 60335-1. The requirements for electric irons are contained in this part 2 Standard and UL 60335-1.

Requirements of this part 2 Standard, where stated, amend the requirements of UL 60335-1.

Where a particular subclause of UL 60335-1 is not mentioned in UL 60335-2-3, the UL 60335-1 subclause applies.

Note – Although the intended primary application of this Standard is stated in its Scope, it is important to note that it remains the responsibility of the users of the Standard to judge its suitability for their particular purpose.

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NATIONAL DIFFERENCES

GENERAL

National Differences from the text of International Electrotechnical Commission (IEC) Publication 60335-2-3, Safety of Household and Similar Electrical Appliances, Part 2: Particular Requirements for Electric Irons, copyright 2008, are indicated by notations (differences) and are presented in bold text.

There are five types of National Differences as noted below. The difference type is noted on the first line of the National Difference in the standard. The standard may not include all types of these National Differences.

DR – These are National Differences based on the **national regulatory requirements**.

D1 – These are National Differences which are based on **basic safety principles and requirements**, elimination of which would compromise safety for consumers and users of products.

D2 – These are National Differences from IEC requirements based on existing **safety practices**. These requirements reflect national safety practices, where empirical substantiation (for the IEC or national requirement) is not available or the text has not been included in the IEC standard.

DC – These are National Differences based on the **component standards** and will not be deleted until a particular component standard is harmonized with the IEC component standard.

DE – These are National Differences based on **editorial comments or corrections**.

Each national difference contains a description of what the national difference entails. Typically one of the following words is used to explain how the text of the national difference is to be applied to the base IEC text:

Addition / Add - An addition entails adding a complete new numbered clause, subclause, table, figure, or annex. Addition is not meant to include adding select words to the base IEC text.

Modification / Modify - A modification is an altering of the existing base IEC text such as the addition, replacement or deletion of certain words or the replacement of an entire clause, subclause, table, figure, or annex of the base IEC text.

Deletion / Delete - A deletion entails complete deletion of an entire numbered clause, subclause, table, figure, or annex without any replacement text.

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FOREWORD

INTERNATIONAL ELECTROTECHNICAL COMMISSION

HOUSEHOLD AND SIMILAR ELECTRICAL APPLIANCES – SAFETY – Part 2-3: Particular requirements for electric irons

1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.

2) The formal decisions or agreements of IEC on technical matters express, as nearly as possible, an international consensus of opinion on the relevant subjects since each technical committee has representation from all interested IEC National Committees.

3) IEC Publications have the form of recommendations for international use and are accepted by IEC National Committees in that sense. While all reasonable efforts are made to ensure that the technical content of IEC Publications is accurate, IEC cannot be held responsible for the way in which they are used or for any misinterpretation by any end user.

4) In order to promote international uniformity, IEC National Committees undertake to apply IEC Publications transparently to the maximum extent possible in their national and regional publications. Any divergence between any IEC Publication and the corresponding national or regional publication shall be clearly indicated in the latter.

5) IEC provides no marking procedure to indicate its approval and cannot be rendered responsible for any equipment declared to be in conformity with an IEC Publication.

6) All users should ensure that they have the latest edition of this publication.

7) No liability shall attach to IEC or its directors, employees, servants or agents including individual experts and members of its technical committees and IEC National Committees for any personal injury, property damage or other damage of any nature whatsoever, whether direct or indirect, or for costs (including legal fees) and expenses arising out of the publication, use of, or reliance upon, this IEC Publication or any other IEC Publications.

8) Attention is drawn to the Normative references cited in this publication. Use of the referenced publications is indispensable for the correct application of this publication.

9) Attention is drawn to the possibility that some of the elements of this IEC Publication may be the subject of patent rights. IEC shall not be held responsible for identifying any or all such patent rights.

This part of International Standard IEC 60335 has been prepared by IEC technical committee 61: Safety of household and similar electrical appliances.

This consolidated version of IEC 60335-2-3 consists of the fifth edition (2002) [documents 61/2096/FDIS and 61/2127/RVD], its amendment 1 (2004) [documents 61/2740/FDIS and 61/2798/RVD], its amendment 2 (2008) [documents 61/3539/FDIS and 61/3593/RVD] and its corrigendum of June 2002.

The technical content is therefore identical to the base edition and its amendments and has been prepared for user convenience.

It bears the edition number 5.2.

A vertical line in the margin shows where the base publication has been modified by amendments 1 and 2.

The French version of this standard has not been voted upon.

This part 2 is to be used in conjunction with the latest edition of IEC 60335-1 and its amendments. It was established on the basis of the fourth edition (2001) of that standard.

NOTE 1 When "Part 1" is mentioned in this standard, it refers to IEC 60335-1.

This part 2 supplements or modifies the corresponding clauses of IEC 60335-1, so as to convert that publication into the IEC standard: Safety requirements for electric irons.

When a particular subclause of Part 1 is not mentioned in this part 2, that subclause applies as far as is reasonable. When this standard states "addition", "modification" or replacement", the relevant text in Part 1 is to be adapted accordingly.

NOTE 2 The following numbering system is used:

– subclauses, tables and figures that are numbered starting from 101 are additional to those in Part 1;

– unless notes are in a new subclause or involve notes in Part 1, they are numbered starting from 101, including those in a replaced clause or subclause;

– additional annexes are lettered AA, BB, etc.

NOTE 3 The following print types are used:

– requirements: in roman type;

– *test specifications: in italic type;*

– notes: in small roman type.

Words in **bold** in the text are defined in Clause 3. When a definition concerns an adjective, the adjective and the associated noun are also in bold.

The following differences exist in some countries indicated below:

– 6.1: Class 0 and Class 0I irons are not allowed (China and Turkey).

– 11.8: The modification to 60 K for polyvinyl chloride insulation does not apply (Japan).

– 11.8: For the test with the iron on the pointed support, all the temperature rise limits apply (USA).

– 19.4: The test is also carried out with the iron on the pointed supports (USA).

– 21.101: The drop test is different (USA).

– 22.106: The endurance test is not carried out (USA).

– 25.7: Polyvinyl chloride cords are not allowed (Canada, Japan and USA).

– 25.14: The flexing test is different (USA).

NOTE 4 The attention of National Committees is drawn to the fact that equipment manufacturers and testing organizations may need a transitional period following publication of a new, amended or revised IEC publication in which to make products in accordance with the new requirements and to equip themselves for conducting new or revised tests.

It is the recommendation of the committee that the content of the amendment 1 be adopted for implementation nationally not earlier than 12 months or later than 36 months from the date of publication.

The committee has decided that the contents of the base publication and its amendments will remain unchanged until the maintenance result date indicated on the IEC web site under "http://webstore.iec.ch" in the data related to the specific publication. At this date, the publication will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

101DV DE *Modification of Note 3 of the part 2:*

Words in SMALL ROMAN CAPITALS in the text are defined in Clause 3.

102DV DE *Add the following before the country clause of the part 2:*

The numbering system in the standard uses a space instead of a comma to indicate thousands and uses a comma instead of a period to indicate a decimal point. For example, 1 000 means 1,000 and 1,01 means 1.01.

103DV D2 *Deletion of the country deviations from the UL part 1 and the part 2:*

The USA differences have been reviewed and developed into UL differences in this part 2 standard.

104DV DE *Modification of the fifth paragraph following item (9) of the Foreword:*

Due to formatting differences, marginal lines are not being used to identify where the base publication has been modified by amendment 1.

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INTRODUCTION

It has been assumed in the drafting of this international Standard that the execution of its provisions is entrusted to appropriately qualified and experienced persons.

This standard recognizes the internationally accepted level of protection against hazards such as electrical, mechanical, thermal, fire and radiation of appliances when operated as in normal use taking into account the manufacturer's instructions. It also covers abnormal situations that can be expected in practice and takes into account the way in which electromagnetic phenomena can affect the safe operation of appliances.

This standard takes into account the requirements of IEC 60364 as far as possible so that there is compatibility with the wiring rules when the appliance is connected to the supply mains. However, national wiring rules may differ.

If an appliance within the scope of this standard also incorporates functions that are covered by another part 2 of IEC 60335, the relevant part 2 is applied to each function separately, as far as is reasonable. If applicable, the influence of one function on the other is taken into account.

When a part 2 standard does not include additional requirements to cover hazards dealt with in Part 1, Part 1 applies.

NOTE 1 This means that the technical committees responsible for the part 2 standards have determined that it is not necessary to specify particular requirements for the appliance in question over and above the general requirements.

This standard is a product family standard dealing with the safety of appliances and takes precedence over horizontal and generic standards covering the same subject.

NOTE 2 Horizontal and generic standards covering a hazard are not applicable since they have been taken into consideration when developing the general and particular requirements for the IEC 60335 series of standards. For example, in the case of temperature requirements for surfaces on many appliances, generic standards, such as ISO 13732-1 for hot surfaces, are not applicable in addition to Part 1 or part 2 standards.

An appliance that complies with the text of this standard will not necessarily be considered to comply with the safety principles of the standard if, when examined and tested, it is found to have other features which impair the level of safety covered by these requirements.

An appliance employing materials or having forms of construction differing from those detailed in the requirements of this standard may be examined and tested according to the intent of the requirements and, if found to be substantially equivalent, may be considered to comply with the standard.

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HOUSEHOLD AND SIMILAR ELECTRICAL APPLIANCES – SAFETY – Part 2-3: Particular requirements for electric irons

1 Scope

This clause of Part 1 is replaced by the following.

This International Standard deals with the safety of electric dry irons and STEAM IRONS, including those with a separate water reservoir or boiler having a capacity not exceeding 5 l, for household and similar purposes, their RATED VOLTAGE being not more than 250 V.

Appliances not intended for normal household use, but which nevertheless may be a source of danger to the public, such as appliances intended to be used by laymen in shops, in light industry and on farms, are within the scope of this standard.

As far as is practicable, this standard deals with the common hazards presented by appliances which are encountered by all persons in and around the home. However, in general, it does not take into account

– persons (including children) whose

• physical, sensory or mental capabilities; or

• lack of experience and knowledge

prevents them from using the appliance safely without supervision or instruction;

– children playing with the appliance.

NOTE 101 Attention is drawn to the fact that

– for appliances intended to be used in vehicles or on board ships or aircraft, additional requirements may be necessary;

– in many countries additional requirements are specified by the national health authorities, the national authorities responsible for the protection of labour and similar authorities.

– additional requirements for pressure vessels may be specified by the national authorities responsible for the safety of pressure vessels.

NOTE 102 This standard does not apply to

– ironers (IEC 60335-2-44);

– appliances designed exclusively for industrial purposes;

– appliances intended to be used in locations where special conditions prevail, such as the presence of a corrosive or explosive atmosphere (dust, vapour or gas).

1DV.1 D1 ***National Difference Deleted***

1DV.2 D2 *Modification to add the following to the second paragraph of Clause 1 of the part 2:*

These requirements apply to electric irons and CORDLESS IRONS rated 250 V or less. These irons are intended to be employed in accordance with the National Electrical Code, ANSI/NFPA 70.

1DV.3 D2 *Add the following to Note 101 of the part 2:*

– additional requirements applicable to equipment intended for use in hazardous locations as defined in the National Electrical Code, ANSI/NFPA 70, are not included in the standard.

1DV.4 D2 *Add the following to Note 102 of the part 2:*

– ironing machines, ironing presses, or other garment finishing appliances that are covered by the Standard for Garment Finishing Appliances, UL 141.

1.101DV D2 *Addition to the part 2:*

Values stated without parentheses are the requirement. Values in parentheses are explanatory or approximate information.

2 Normative references

This clause of the Part 1 is applicable.

3 Definitions

This clause of Part 1 is applicable except as follows.

3.1.9 *Replacement:*

NORMAL OPERATION: Operation of the appliance under the following conditions.

The iron is placed on its STAND and is operated with its THERMOSTAT at the highest setting.

If the iron does not have a THERMOSTAT, the surface temperature at the mid-point of the centre line of the SOLEPLATE is maintained at 250 °C ± 10 °C by switching the supply on and off, or at the highest temperature if it is lower.

STEAM IRONS with a separate water reservoir or boiler are operated with the water reservoir or boiler filled with water.

PRESSURIZED STEAM IRONS incorporating the boiler are operated with or without water, whichever is more unfavourable.

Other STEAM IRONS are operated empty.

3.101 STEAM IRON: Iron having means to produce and supply steam to the textile material during ironing.

NOTE STEAM IRONS may incorporate a means for blowing steam onto clothes.

3.102 VENTED STEAM IRON: STEAM IRON in which steam is produced when the water contacts the SOLEPLATE, the water reservoir being at atmospheric pressure.

NOTE The water reservoir may be incorporated in the iron or is connected to the iron by a hose.

3.103 PRESSURIZED STEAM IRON: STEAM IRON in which steam is produced in a boiler at a pressure exceeding 50 kPa.

NOTE The boiler may be incorporated in the iron or is connected to the iron by a hose.

3.104 INSTANTANEOUS STEAM IRON: STEAM IRON in which small quantities of water are pumped from the water reservoir and in which steam is produced when the water contacts the walls of the boiler, the water reservoir and the boiler being at atmospheric pressure.

NOTE The water reservoir and the boiler are connected to the iron by a hose.

3.105 CORDLESS IRON: Iron that is connected to the supply only when placed on its STAND.

NOTE CORDLESS IRONS may be directly connected to the supply mains during ironing by a DETACHABLE PART to which the SUPPLY CORD is fixed.

3.106 SOLEPLATE: Heated part of the iron which is pressed against the textile material while ironing.

3.107 STAND: Heel of the iron or a separate part provided with the iron, on which the iron is placed when at rest.

NOTE The separate water reservoir or boiler may serve as the STAND.

3.108DV D2 *Addition of the following definition to the part 2:*

AUTOMATIC IRON: An iron having some form of automatic temperature control, usually a thermostatic control, that operates automatically within predetermined temperature limits to open and close the circuit through the heating element.

3.109DV D2 *Addition of the following definition to the part 2:*

CORD STORAGE DEVICE: A covered spool for storage of insulated flexible power supply cord but does not enclose or support uninsulated live parts.

4 General requirement

This clause of Part 1 is applicable.

5 General conditions for the tests

This clause of Part 1 is applicable except as follows.

5.2 *Addition:*

NOTE 101 If a PROTECTIVE DEVICE becomes open circuit during the test of 21.101, the test is continued on a separate appliance.

NOTE 102 The test of 21.102 is carried out on a separate appliance. The additional test of 25.14 is carried out on a separate appliance.

5.3 *Addition:*

For irons with a THERMOSTAT the test of 21.101 is carried out before that of Clause 11.

The test of 22.102 is carried out during the test of Clause 11.

5.101 *Irons are tested as HEATING APPLIANCES even if they incorporate a motor.*

5.102 *If a CORDLESS IRON can also be directly connected to the supply mains during ironing, the relevant tests are applicable for both modes of operation.*

6 Classification

This clause of Part 1 is applicable.

7 Marking and Instructions

This clause of Part 1 is applicable except as follows.

7.1 *Modification:*

Appliances shall be marked with their RATED POWER INPUT.

Addition:

Separate STANDS shall be marked with

– name, trademark or identification mark of the manufacturer or responsible vendor;

– model or type reference of the STAND.

STANDS of CORDLESS IRONS shall be marked with their

– RATED VOLTAGE or RATED VOLTAGE RANGE;

– RATED POWER INPUT.

7.8DV D2 *National Difference Deleted*

7.12 *Addition:*

The instructions shall contain the substance of the following:

– the iron must not be left unattended while it is connected to the supply mains;

– the plug must be removed from the socket-outlet before the water reservoir is filled with water (for STEAM IRONS and irons incorporating means for spraying water);

– the filling aperture must not be opened during use. Instructions for the safe refilling of the water reservoir shall be given (for PRESSURIZED STEAM IRONS);

– the iron must only be used with the STAND provided (for CORDLESS IRONS);

– the iron is not intended for regular use (for travel irons).

– the iron must be used and rested on a stable surface;

– when placing the iron on its stand, ensure that the surface on which the stand is placed is stable;

– the iron is not to be used if it has been dropped, if there are visible signs of damage or if it is leaking.

7.12DV D2 ***Modification to add the following to 7.12 of the part 2:***

Unless a conflict exists as a result of the application of an instruction item to a specific product, the text of the instructions shall be as shown or the equivalent. The items are not required to be numbered. The headings "READ ALL INSTRUCTIONS BEFORE USING" and "SAVE THESE INSTRUCTIONS" shall be first and last respectively in the list of items. Other important safety instruction items required by the manufacturer may be included.

IMPORTANT SAFETY INSTRUCTIONS

When using an iron, basic precautions should always be followed, including the following:

READ ALL INSTRUCTIONS BEFORE USING

1. Only use an iron for its intended use.

2. To avoid the risk of electric shock, do not immerse the iron in water or other liquids.

3. Always turn the iron OFF before plugging or unplugging the iron from the electrical outlet. Never pull on the cord to disconnect the iron from the electrical outlet; instead, grasp the plug and pull on the plug to disconnect the iron.

4. Do not let the cord touch hot surfaces. Let the iron cool completely before putting the iron away. Coil the cord loosely around the iron when storing.

5. Always disconnect the iron from the electrical outlet before filling the iron with water, emptying the water from the iron, and when the iron is not in use.

6. Do not operate the iron with a damaged cord or in the event the iron has been dropped or damaged. To avoid the risk of electric shock, do not disassemble the iron. Take it to a qualified serviceman for examination and repair. Incorrect assembly might result in a risk of electric shock when the iron is used after reassembly.

7. Close supervision is required for any appliance used by or near children. Do not leave the iron unattended while the iron is connected or on an ironing board.

8. Burns can occur from touching hot metal parts, hot water, or steam. Use caution when you turn a STEAM IRON upside down – there might be hot water in the reservoir.

9. To avoid a circuit overload, do not operate an iron on the same circuit with another high wattage appliance.

10. If an extension cord is absolutely necessary, a cord with an ampere rating equal to or greater than the maximum rating of the iron shall be used. A cord rated for less

amperage can result in a risk of fire or electric shock due to overheating. Care shall be taken to arrange the cord so that it cannot be pulled or be tripped over.

SAVE THESE INSTRUCTIONS

7.15 *Addition:*

For STEAM IRONS with a separate water reservoir or boiler, the total RATED POWER INPUT shall be marked on the part containing the supply terminals or SUPPLY CORD.

8 Protection against access to live parts

This clause of Part 1 is applicable except as follows.

8.1.1DV D1 *Modification of 8.1.1DV of the UL part 1:*

The articulated probe of figure 12DV shall be applied without appreciable force for these products.

8.1.2 *Addition:*

NOTE 101 Connecting devices in STANDS of CORDLESS IRONS are not considered to be socket-outlets.

9 Starting of motor-operated appliances

This clause of Part 1 is not applicable.

10 Power input and current

This clause of Part 1 is applicable.

11 Heating

This clause of Part 1 is applicable except as follows.

11.2 *Replacement:*

Irons are placed on their STANDS on the floor of a test corner and away from the walls. However, the separate water reservoir or boiler of STEAM IRONS is placed as near to the walls as possible. Dull black painted plywood approximately 20 mm thick is used for the test corner.

VENTED STEAM IRONS with a separate water reservoir, PRESSURIZED STEAM IRONS and INSTANTANEOUS STEAM IRONS are tested both with the water reservoir empty and filled but without steam emission.

Irons, other than CORDLESS IRONS, are also tested with the SOLEPLATE in the horizontal position placed on three pointed metallic supports that have a height of at least 100 mm. VENTED STEAM IRONS with a separate water reservoir, PRESSURIZED STEAM IRONS and INSTANTANEOUS STEAM IRONS are operated with the water reservoir or boiler filled.

For appliances provided with an automatic cord reel, one-third of the total length of the cord is unreeled. The temperature rise of the cord sheath is determined as near as possible to the hub of the reel and also

between the two outermost layers of the cord on the reel. However, if the cord reel is incorporated in a part that is moved during ironing, the cord is completely unreeled.

For cord storage devices, other than automatic cord reels, that are intended to partially accommodate the SUPPLY CORD while the appliance is in operation, 50 cm of the cord is unwound. However, for cord storage devices on parts that are moved during ironing, the cord is completely unwound. The temperature rise of the stored part of the cord is determined at the most unfavourable place.

11.4 *Addition:*

If the temperature rise limits are exceeded in appliance incorporating motors, transformers or ELECTRONIC CIRCUITS and the power input is lower than the RATED POWER INPUT, the test is repeated with the appliance supplied at 1,06 times RATED VOLTAGE.

11.7 *Replacement:*

Irons are operated until steady conditions are established.

When VENTED STEAM IRONS with a separate water reservoir, PRESSURIZED STEAM IRONS and INSTANTANEOUS STEAM IRONS are tested with the iron placed on the pointed supports, steam is emitted in cycles, each cycle having a period of 10 s with steam emission and a period of 10 s with the steam emission interrupted.

11.8 *Modification:*

Except for SUPPLY CORDS connected to separate containers, the temperature rise limit for the insulation of wiring and SUPPLY CORDS is increased from 50 K to 60 K.

Addition:

During the test with the iron placed on the pointed supports, only the temperature rises of the insulation of internal wiring and flexible cords are measured. However, the temperature rise limits apply to the water reservoir and the hose of PRESSURIZED STEAM IRONS and INSTANTANEOUS STEAM IRONS. The temperature rise of the ACCESSIBLE SURFACE of the hose shall comply with the temperature rise limits for handles that are held for short periods only in normal use. However, if a non-metallic hose is covered by textile material, the temperature rise of the surface of the textile material shall not exceed 80 K.

The temperature rise limits of motors, transformers, components of electronic circuits and parts directly influenced by them may be exceeded when the appliance is operated at 1,15 times RATED POWER INPUT.

11.8DV.1 DC *Modification to additionally revise Table 3 of the part 1:*

Add the following to Table 3:

a) Add a row “At any point on a surface adjacent to the stationary portion of a permanently connected iron, including the surface on which the stationary portion of the iron is mounted. 65K”

b) Add a row “Iron handle[m]

– Metallic 30K

– Non-metallic 50K”

c) Add a row “A part near a handle that is subject to unintentional contact[m,n]

– Metallic 35K

– Non-metallic 60K”

d) Add a row “A knob, a grip, or similar surface that, in normal use, is held only for short periods. For example, a switch or thermostat adjustment[m]

– Metallic 35K

– Non-metallic 60K”

e) Add a footnote "[m] In determining the temperature rises of a handle, a knob, a grip, and similar surfaces, all portions of these parts that are gripped in normal use are to be investigated."

f) Add a footnote "[n] See 11.8DV.3.2 and 11.8DV.3.3."

11.8DV.2 D2 *Modification of 11.8 of the part 2:*

All temperature limits apply during these tests.

11.8DV.3 D2 *Modification to add 11.8DV.3.1 – 11.8DV.3.3 to 11.8 of the UL part 1:*

11.8DV.3.1 With reference to table 3, note (e)(2), the coefficient of thermal conductivity of a material can be determined by comparison with materials having known coefficients. Samples of materials with known values of the coefficient constant and a sample of the material for which the coefficient is to be determined – all samples having the same dimensions – are fixed to a heated metal plate. The temperatures of the faces of the reference samples opposite the heated metal plate are plotted as a function of the constant. The constant to be determined is derived from this curve by reading the value corresponding to the temperature attained by the sample under investigation.

11.8DV.3.2 With reference to 11.8DV.1(c) and footnote n of table 3, parts likely to be contacted unintentionally include those parts within 12,7 mm (0,5 in) of the bottom surface of a gauge constructed as shown in Figure 101DV, when the gauge is centered in the handle opening as shown in Figure 102DV (C = D). For a handle having one end open, the end of the gauge is to be located 50,8 mm (2 in) from the inside surface of the closed end. If the shape of the underside of the handle prevents contact of the gauge at both points A and B simultaneously, measurements are to be made first with one point and then with the other point in contact with the underside of the handle.

11.8DV.3.3 With reference to 11.8DV.1(c) and footnote n of table 3, a part is not considered likely to be contacted unintentionally if it is recessed or set back 3,2 mm (1/8 in) or more from an opening having at least one dimension not larger that 9,5 mm (3/8 in).

Table 3DV DC *National Difference Deleted*

11.101DV D2 *Addition of 11.101DV.1 – 11.101DV.11 to the part 2:*

11.101DV.1 The SOLEPLATE of an AUTOMATIC IRON operated as described in 11.101DV.5 and 11.101DV.7 – 11.101DV.9 or a CORDLESS IRON operated as described in 11.101DV.5 – 11.101DV.9, shall not exceed:

a) A temperature of 350°C (662°F) during an initial interval of operation consisting of the first on period plus the first 5 min following the first thermostat cutoff;

b) An average maximum temperature of 350°C (662°F) after the initial interval of operation described in item (a); or

c) An average temperature – the average of the mean of the maximum temperatures and the mean of the minimum temperatures – of 315°C (599°F) after the initial interval of operation described in item (a).

11.101DV.2 With reference to 11.101DV.1(a), the maximum SOLEPLATE temperature may be more than 350°C (662°F) during the initial interval if the iron is tested as described in 11.101DV.9 and 11.101DV.11, and there is no evidence of ignition of the padding when the iron is lifted from the horizontal test STAND during the cooling cycles within this interval.

11.101DV.3 When operated as described in 11.101DV.9 and 11.101DV.11, the SOLEPLATE temperature of a nonautomatic iron shall not exceed 315°C (599°F).

11.101DV.4 Compliance is checked by the tests of 11.101DV.5 – 11.101DV.11.

11.101DV.5 If the temperature control is adjustable, the iron is to be operated with the control set to give the highest temperature values.

11.101DV.6 A CORDLESS IRON is to be energized in its power STAND.

11.101DV.7 For the test described in 11.101DV.2, a CORDLESS IRON is to be electrically connected to the power STAND and placed with the SOLEPLATE down on a padded softwood horizontal test stand as described in 11.101DV.10.

11.101DV.8 The iron is to be supported on three pointed 6,4-mm (1/4-in) diameter metal rods. The radius at the point is to be approximately 1,6 mm (1/16 in). The rods are to have 100 mm (4 in) or more of exposed length below the SOLEPLATE. The rods are to be standing on end or inserted in a supporting base and are to be positioned to provide the greatest stability. See Figure 103DV.

11.101DV.9 The SOLEPLATE temperature is to be measured at the hottest part on the SOLEPLATE as determined by a scorch print. A thermocouple of 30 AWG iron and constantan wires is to be:

a) Peened into a small hole approximately 0,8 mm (1/32 in) in diameter at the hottest part of the SOLEPLATE; or

b) Applied to the SOLEPLATE as described in Figure 103DV.

11.101DV.10 A scorch print is to be made by placing the iron, in the dry mode, on the test fixture, Figure 103DV, and energizing the iron until the SOLEPLATE temperature at the

midpoint exceeds 204°C (400°F). The iron is then to be disconnected from the supply and the iron is to be placed on a sheet of white paper spread over an ironing board for sufficient time to develop a scorch pattern – normally a few seconds. After removal of the iron, darkening of the paper indicates the temperature distribution over the SOLEPLATE. The hottest point is the center of the darkest area. The coolest point is the center of the lightest area. Positive phototype paper, white tracing paper, or white blotting paper may be used as the white paper for this measurement.

11.101DV.11 For the test described in 11.101DV.2 and 11.101DV.3, the iron is to be placed with the SOLEPLATE down on a padded softwood horizontal test stand. The padding on the test stand is to consist of eight thicknesses of cloth. The cloth is to be bleached cheesecloth running approximately 26 – 28 square meters per kilogram mass (14 – 15 square yards per pound mass) and having what is known in the trade as a count of 32 by 28, that is, for any square centimeter, 13 threads in one direction and 11 in the other direction (for any square inch, 32 threads in one direction and 28 threads in the other direction).

12 Void

13 Leakage current and electric strength at operating temperature

This clause of Part 1 is applicable.

14 Transient overvoltages

This clause of Part 1 is applicable.

15 Moisture resistance

This clause of Part 1 is applicable except as follows.

15.2 *Modification:*

The test for STEAM IRONS, other than those with a separate water reservoir or boiler, is carried out as follows:

The iron is placed in the filling position according to the instructions and filled with water containing approximately 1% NaCl. A further quantity of 0,1 l is steadily poured into the filling opening over a period of 1 min. The iron is then placed on its STAND and subjected to the electric strength test of 16.3. The iron is left on its STAND for 10 min after which the electric strength test is repeated.

The iron, while still filled, is operated at RATED POWER INPUT for 1 min under NORMAL OPERATION. It shall then withstand the electric strength test of 16.3.

CORDLESS IRONS are also filled with the saline solution while resting on their STANDS, if the iron can easily be filled in that position.

16 Leakage current and electric strength

This clause of Part 1 is applicable.

17 Overload protection of transformers and associated circuits

This clause of Part 1 is applicable.

18 Endurance

This clause of Part 1 is not applicable.

19 Abnormal operation

This clause of Part 1 is applicable except as follows.

19.1 *Modification:*

The tests of 19.2 and 19.3 are not carried out. The test of 19.5 is only carried out on separate boilers of STEAM IRONS.

Addition:

CORDLESS IRONS are also subject to the test of 19.101.

19.4 *Modification:*

The test is carried out at RATED POWER INPUT.

Addition:

STEAM IRONS are tested with or without water, whichever is more unfavourable.

The test is only carried out with the iron on its STAND.

Any control that limits the pressure during the test of Clause 11 is rendered inoperative.

19.4DV D2 *Modification of the second paragraph of the addition to 19.4 of the part 2 by replacement with the following:*

The test is carried out with the iron on its STAND and on pointed supports.

19.7 *Addition:*

The test is carried out for 5 min unless the motor is kept switched on by hand.

19.101 *CORDLESS IRONS are operated under NORMAL OPERATION at RATED POWER INPUT until the THERMOSTAT operates for the first time. The iron is then placed on its STAND in the position that most adversely affects the material of the STAND.*

20 Stability and mechanical hazards

This clause of Part 1 is applicable except as follows.

20.1 *Replacement:*

Irons shall have adequate stability.

Compliance is checked by the following test.

Irons incorporating a STAND are placed on their STAND on a plane inclined at an angle of 10° to the horizontal, the cord resting on the inclined plane in the most unfavourable position. Irons supplied with a separate STAND are placed on the STAND on a plane inclined at an angle of 15° to the horizontal.

Appliances intended to be filled with liquid by the user in normal use are tested empty or filled with the most unfavourable quantity of water up to the capacity indicated in the instructions.

NOTE 101 The STAND may be tapped to overcome static friction between the iron and the STAND.

NOTE 102 The appliance is not connected to the supply mains.

If the iron overturns or slips off the STAND in one or more positions, it is tested as specified in Clause 11 in all these positions.

The temperature rise shall not exceed the values specified in Table 9.

20.2DV D1 *Modification of 20.2DV of the UL part 1:*

The articulated probe of figure 12DV shall be applied without appreciable force for these products.

21 Mechanical strength

This clause of Part 1 is applicable except as follows.

Addition:

Compliance is also checked by the tests of 21.101 and 21.102.

21.1DV.2 D2 *Deletion of 21.1DV.2 in the Part 1:*

This national difference does not apply.

21.101 *The iron is operated under NORMAL OPERATION at RATED POWER INPUT and, except for CORDLESS IRONS, the SOLEPLATE temperature is maintained under these conditions throughout the test.*

The iron is then suspended by its handle with the SOLEPLATE in the horizontal position. It is dropped from a height of 40 mm onto a rigidly supported steel plate having a thickness of at least 15 mm and a mass of at least 15 kg. The test is carried out 1 000 times at a rate not exceeding 20 drops per min.

The test is conducted so that the iron rests on the steel plate for approximately 15% of the time.

NOTE The iron is suspended so that the impact energy is only influenced by its mass.

After the test, the iron shall not be damaged to such an extent that compliance with 8.1, 15.2, and Clause 29, is impaired. In case of doubt, SUPPLEMENTARY INSULATION and REINFORCED INSULATION is subjected to the electric strength test of 16.3.

21.101DV D1 *Deletion of 21.101 of the part 2:*

Delete 21.101. See 21.102DV.

21.102 *A separate sample of the iron is supplied at RATED VOLTAGE with the THERMOSTAT set to the highest position. When the THERMOSTAT operates, the iron is disconnected from the supply.*

The iron is then placed in a sling that is constructed by tying together the four corners of a single layer of cheesecloth. The lowest point of the sling is suspended at a height of 900 mm above a horizontal hardwood board approximately 20 mm thick placed on a concrete or similar hard surface.

The iron in the sling is dropped from a stationary position. The test is carried out three times, the iron being positioned so that it falls onto the board first on the right side, then on the left side and subsequently on its heel. The iron is reheated prior to each drop.

After the test, the iron shall withstand the electric strength test of 16.3, steam irons first being filled with water as specified in the instructions and allowed to rest for 10 min on their STANDS.

The iron shall not be damaged to such an extent that compliance with 8.1 and 19.4 is impaired.

NOTE This test is only applicable to hand-held parts of the iron.

21.102DV D1 *Modification of 21.102 of the part 2 by replacement with 21.102DV.1 to 21.102DV.9:*

21.102DV.1 Compliance is checked by the drop test of 21.102DV.2 – 21.102DV.9.

21.102DV.2 An AUTOMATIC IRON is to be dropped five times from a height of 0,9 m (3 ft) onto a wooden floor – once each side, once on the point, once on the heel, and once flat. The first drop is to be carried out with the iron cold before it is connected to the supply circuit; the second drop is to be carried out after the iron has been heating for 2 min and with the thermostatically controlled switch in the closed position; the third drop is to be carried out after the iron has become well heated and with the thermostat in the closed position; the fourth drop is to be carried out just after the thermostat has operated to open the switch; and the fifth drop is to be carried out after the iron has cooled halfway to room temperature.

21.102DV.3 The drop tests are to be carried out with water filled to the maximum level in the reservoir of a STEAM IRON. Tape, silicon sealant, or equivalent means may be used to prevent water from exiting the iron though the fill opening.

21.102DV.4 The wooden floor is to consist of a layer of nominally 25,4-mm (1-in) thick tongue-and-groove oak flooring mounted on two layers of 19,1-mm (3/4-in) plywood. The assembly is to rest on a concrete floor, or the equivalent during the test.

21.102DV.5 It is acceptable for the drop test to be carried out on a previously untested iron. However the iron is first to be subjected to the SOLEPLATE temperature test described in Clause 11.101DV, and following the test drop is to be subjected to a repeated SOLEPLATE temperature test, and to the tests of Clause 13.3.

21.102DV.6 The iron subjected to the test specified in 21.102DV.2 is also to be dropped 3 times from a height of 0,9 m (3 ft) so that the handle strikes the wooden floor. The iron is to be cold and is to be dropped so that the handle strikes in a different location each time –

usually front, back, and center. The front and back drops are to be carried out with the SOLEPLATE at a 45 degree angle to the horizontal, and the center drop is to be carried out with the SOLEPLATE horizontal and facing up. So that the handle strikes the intended location, the iron is to be supported on a drop platform tester so that rotation does not occur during the drop, or rotation is to be prevented by supporting the iron in the desired orientation in a sling made by tying the four corners of a single layer of cloth measuring 457 mm (18 in) by 457 mm (18 in) to a single drop cord. The power-supply cord may be piled on top of the iron or cut off if the iron is not needed for subsequent tests. The iron is to be dropped after it has been suspended and all motion has ceased.

21.102DV.7 At the manufacturer's option, a previously untested iron may be used for the handle drop test.

21.102DV.8 After being dropped on the handle, the iron shall comply with 21.102DV.9 and shall comply with the tests of Clause 13.3, except that the test potential for the electric strength test is to be 500 V.

21.102DV.9 The drop tests shall not:

a) Cause an opening in the enclosure of an iron that will enable a probe having the dimensions shown in figure 12DV to contact an uninsulated live part when inserted point-first into the opening;

b) Damage an iron to the extent that it does not comply with the requirements in Clause 11.101DV;

c) Result in leakage of water or steam from the water reservoir or steam chamber into the electrical compartment.

22 Construction

This clause of Part 1 is applicable except as follows.

22.7 *Replacement:*

PRESSURIZED STEAM IRONS and INSTANTANEOUS STEAM IRONS shall incorporate adequate safeguards against the risk of excessive pressure.

If jets of steam or hot water are emitted through PROTECTIVE DEVICES, the electrical insulation shall not be affected or the user exposed to a hazard.

Compliance is checked by inspection and by the following test.

For PRESSURIZED STEAM IRONS, the maximum pressure occurring during the test of Clause 11 with the boiler filled but without steam emission, is measured. All pressure-regulating devices that operated during the test are rendered inoperative and the pressure shall not exceed three times the previously measured value. Any pressure-limiting PROTECTIVE DEVICE is then rendered inoperative and the pressure in the boiler is raised hydraulically to five times the pressure measured originally or twice the pressure measured with the pressure-regulating device rendered inoperative, whichever is higher. This pressure is maintained for 1 min. There shall be no leakage from the appliance.

PRESSURIZED STEAM IRONS in which the device regulating the steam supply is within the boiler are operated as specified in Clause 11 but with air pressure-regulating devices operating during the test of Clause 11 rendered inoperative. All vents in the SOLEPLATE are sealed and the device regulating the steam supply is

opened. There shall be no leakage from the hose except at an intentionally weak place within the enclosure of the boiler. If this occurs, the test is repeated on another appliance that shall also leak in the same way.

All vents in the SOLEPLATE of INSTANTANEOUS STEAM IRONS, are sealed and the pressure in the water reservoir is raised hydraulically until the pressure-limiting PROTECTIVE DEVICE operates. The pressure shall not exceed 50 kPa. The outlet through the PROTECTIVE DEVICE is then sealed and the pressure is raised to 100 kPa and maintained at this value for 1 min. There shall be no leakage from the appliance.

22.101 Irons shall be provided with a STAND.

Compliance is checked by inspection.

22.102 STEAM IRONS shall be constructed so that there is no spillage of water or sudden jets of steam or hot water likely to expose the user to a hazard when the iron is used in accordance with the instructions for use.

When removing the filling cap of boilers, the pressure shall be relieved in a controlled manner before the cap is removed completely, so as to avoid the emission of jets of steam or hot water in a manner likely to expose the user to a hazard.

Compliance is checked by inspection during the test of Clause 11 and by removing the filling cap at the end of the test.

22.103 The water reservoir of STEAM IRONS with a separate boiler shall incorporate at least one NON-SELF-RESETTING THERMAL CUT-OUT that is only accessible by means of a TOOL.

Compliance is checked by inspection.

22.104 Pressure limiting PROTECTIVE DEVICES that operate during the tests of 19.4 and 22.7 shall have an inlet aperture at least 5 mm in diameter or 20 mm^2 in area and a width of at least 4 mm. The area of the aperture at the outlet shall not be less than that of the aperture at the inlet.

Compliance is checked by measurement.

22.105 The connection contacts of CORDLESS IRONS shall be constructed so that any electrical or mechanical failure occurring in normal use will not give rise to a hazard.

Compliance is checked by the following test.

The two live pins of the iron are connected together and an external resistive load is connected in series with the supply. The external load is such that the current is 1,1 times the RATED CURRENT when the iron is supplied at RATED VOLTAGE.

The iron is placed on its STAND and withdrawn 50 000 times, at a rate of 10 times per minute. The test is continued for a further 50 000 times without current flowing.

After the test the iron shall be fit for further use and compliance with 8.1, 16.3, 27.5 and Clause 29, shall not be impaired.

22.105DV D2 ***Modification of the fourth paragraph of 22.105 of the part 2 by replacement with the following:***

The iron is placed on its STAND and withdrawn 6 000 times at a rate of 6 – 10 times per minute. It is acceptable to carry out the test with or without current flowing.

22.106 CORDLESS IRONS which may be directly connected to the supply mains during ironing shall be constructed so that the force necessary to withdraw the connector from the iron is at least 30 N.

Compliance is checked by measurement.

NOTE Any locking device is engaged before carrying out the test.

22.107 PRESSURIZED STEAM IRONS incorporating more than one water reservoir connected together shall incorporate a pressure-limiting PROTECTIVE DEVICE in each reservoir containing a heating element.

Compliance is checked by inspection.

23 Internal wiring

This clause of Part 1 is applicable.

24 Components

This clause of Part 1 is applicable except as follows.

24.1.3 *Addition:*

Switches that control steam or water emission are subjected to 50 000 cycles of operation.

24.4 *Addition:*

NOTE 101 This requirement is not applicable to the connection between the iron and the STAND of CORDLESS IRONS.

24.101 Any component incorporated in an iron for compliance with 19.4 shall not be self-resetting and only accessible by means of a TOOL.

Compliance is checked by inspection.

25 Supply connection and external flexible cords

This clause of Part 1 is applicable except as follows.

25.5 *Addition:*

TYPE Z ATTACHMENT is allowed for travel irons and CORDLESS IRONS.

NOTE 101 TYPE Z ATTACHMENT is not allowed for CORDLESS IRONS that may also be directly connected to the supply mains during ironing.

25.7 *Addition:*

Braided cords may be used.

Polyvinyl chloride sheathed cords are only allowed as the supply cords for STANDS of CORDLESS IRONS and for the separate water reservoir or boiler of STEAM IRONS. This does not apply to supply cords having a cross-linked PVC sheath (code designation 60245 IEC 87 or code designation 60245 IEC 88).

NOTE 101 Polyvinyl chloride cords are not allowed for CORDLESS IRONS that may also be directly connected to the supply mains during ironing.

25.7DV.1 D2 *Modification to delete the second paragraph and note 101 of 25.7 of the part 2.*

25.7DV.2 D2 *Replacement of 25.7 of the UL part 1:*

A supply cord shall be Type HPD, HPN, HS, HSJ, HSJO, HSO, or an equivalent heater cord. For STANDS of CORDLESS IRONS and for the separate water reservoir or boiler of STEAM IRONS, where the supply cord is not likely to touch surfaces exceeding 121ºC during Heating, Clause 11, the cord may be Type SJ, SJO, SJT, or an equivalent cord type for commercial type; and Type SJ, SJO, SJT, SPT-2, SVT or an equivalent cord type for household type.

25.14 *Modification:*

Instead of the load specified for the cord, the cord is loaded with a mass of 2 kg.

Instead of the number of flexings specified, the number of flexings is 20 000.

NOTE 101 The test is not carried out on CORDLESS IRONS unless the iron can also be directly connected to the supply mains during ironing.

Addition:

For STEAM IRONS with a separate water reservoir or boiler, the test is made on the steam hose and the INTERCONNECTION CORD together. If they are contained in one sheath or otherwise attached to each other, the assembly is not turned through an angle of 90°.

The test shall not result in:

– *loosening of the hose;*

– *damage to the hose to such an extent that compliance with this standard is impaired;*

– *leakage from the hose.*

Appliances are also subjected to the following test while mounted on an apparatus similar to that of Figure 8. This test is carried out on a separate appliance.

The SUPPLY CORD is suspended vertically from the appliance and is loaded so that a force of 10 N is applied. The oscillating member is moved through an angle of 180° and back to the initial position. The number of flexings is 2 000, the rate of flexing being six per minute.

NOTE 102 The appliance is mounted so that the direction of flexing corresponds to that most likely to occur when the SUPPLY CORD is wound around it for storage.

NOTE 103 The test is not carried out if it is unlikely that the cord will be wrapped around the appliance, for example CORDLESS IRONS and irons with a separate water reservoir.

25.14DV D2 *Modification of Clause 25.14 of the Part 2 by replacement with the following:*

25.14DV.1 Compliance is checked by the cord flexing test in Clauses 25.14DV.2 – 25.14DV.6. Appliances with automatic or manual cord reels shall comply with these requirements in addition to those of Clause 22.16.

25.14DV.2 To determine whether the cord including any guard provided with the cord are acceptable, the tests in 25.14DV.3 – 25.14DV.5 are to be conducted. During the test, the cord shall not develop an open circuit, and there shall be no exposure of an uninsulated conductor strand. Travel irons and irons with cord reels or cord storage device shall be flexed for 50,000 cycles, and all other irons shall be flexed for 100,000 cycles. The power STAND of a CORDLESS IRON is not required to be tested.

25.14DV.3 To conduct the flexing test referred to in 25.14DV.2, six assemblies of the cord and cord guard are to be assembled to electric irons, simulated mounting surfaces, or test-fixtures, so that the assemblies do not interfere with the test procedure. Each assembly is to be mounted so that rotation is centered at the point where the guard enters the unit. See Figure 104DV. For the start of the test, the axis of the cord guard is to be positioned vertically with the cord end down. The cord is to be passed through a horizontal bushing having a smoothly rounded 25,4 mm (1-in) diameter opening, located 610 mm (2 ft) below the cord guard entry to the electric iron. The free end of the cord is to be attached to a 110-g (1/4-lb) unsupported weight. One or more complete electric irons of the maximum rating intended for use with the cord and with the THERMOSTAT bypassed are to be used as the electrical load, or the leads for each assembly that are normally connected to the heating elements are to be connected to a load that draws the same current. The supply end of the cord is to be connected to a 120-V circuit protected by a 20-A time-delay fuse. One or more series current relays are to be provided to shut down the machine if a conductor opens. The six assemblies are to be flexed through an angle of 180 degrees, as illustrated in Figure 104DV, by a machine at a rate of 20 cycles per minute, unless faster cycling is agreeable to those concerned.

25.14DV.4 With reference to 25.14DV.3, one cycle consists of 90-degree rotation of the test assembly in one direction, 180-degree rotation in the opposite direction and then return to the starting point. Flexing through an angle of 90 degrees in one direction only and return to the starting point is acceptable if the number of cycles is doubled and the flexing is changed to the opposite direction after each 10 000 cycles.

25.14DV.5 Six additional cords or cord and guard assemblies are to be assembled to electric irons, simulated mounting surfaces, or test-fixtures so that the samples do not interfere with the test procedure and are to be subjected to the conditioning and flexing test described in 25.14DV.6. During the test, the circuit shall not develop an open circuit, and there shall be no exposure of an uninsulated conductor strand. Following the test there shall be no visible cracks in the cord or cord guard.

25.14DV.6 To conduct the test required by 25.14DV.5, the cord and cord guard are to be conditioned for 96 h in an oven maintained at a temperature of 20°C (36°F) more than the maximum temperature observed on the cord or cord guard during the temperature test, but not less than 100°C (212°F). Following the conditioning, the assemblies are to be flexed for 5 000 cycles as specified in 25.14DV.4.

25.15DV D2 *Addition of 25.15DV.1 – 25.15DV.3 to the part 1:*

25.15DV.1 The cord anchorage for an iron shall withstand the drop test described in 25.15DV.3:

a) Without deformation of the anchoring surface that results in a risk of fire or electric shock, such as cutting insulation or cracking or chipping the anchorage means; and

b) At the point of disconnection of the conductors, there shall not be such movement of the cord as to indicate stress on the connections.

25.15DV.2 Compliance is checked by inspection and by the following test.

25.15DV.3 The iron is to be suspended by the line cord so that the distance from the point of support to the point of entry of the cord into the iron is 610 mm (2 ft). The iron is to be raised until the cord entry reaches the support plane and is then to be dropped.

26 Terminals for external conductors

This clause of Part 1 is applicable.

27 Provision for earthing

This clause of Part 1 is applicable.

28 Screws and connections

This clause of Part 1 is applicable.

29 CLEARANCES, CREEPAGE DISTANCES, and solid insulation

This clause of Part 1 is applicable.

30 Resistance to heat and fire

This clause of Part 1 is applicable except as follows.

30DV D2 *Modification to replace Section 30 of the Part 1 and the Part 2 with the following:*

The requirements in 30.101DV – 30.103DV supersede those found in the Standard for Polymeric Materials – Use in Electrical Equipment Evaluation, UL 746C.

30.1 *Addition:*

For irons with THERMOSTATS, the temperature rises occurring during Clause 19 are not taken into consideration.

30.2.3 Not applicable.